



digital dna[™]

*SOFTWARE AND
DEVELOPMENT TOOLS*

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SG1011/D REV 0

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HOW THIS SELECTOR GUIDE IS ORGANIZED

This selector guide presents software and development tool information that corresponds to specific selector guides in the SG1000 series. These sections include the following:

- 32-Bit Embedded Processors (SG1001/D)
- Analog (SG1002/D)
- Digital Signal Processors (SG1004/D)
- Microcontrollers (SG1006/D)
- Network and Communications Processors (SG1007/D)

32-BIT EMBEDDED PROCESSORS SOFTWARE TOOLS

68K, ColdFire, MPC5xx, PowerPC ISA, and MCOE — Metrowerks

Product	Description	Target Support	RTOS Support	Board Support	Host-Target Interface	Host Platforms	Language Support	Compiler Output Formats
CW68K	CodeWarrior Software Development Tools for 68K Embedded Systems	68xxx, MC68360, MC68SZ328, MC68VZ328, MC68EZ328	PPSM, RTXC, ATI	DragonBall EZ (M68EZ328ADS); DragonBall VZ (M68VZ328ADS); ADS68360; DragonBall Super VZ (M68SZ328ADS)	MetroTRK; P&E Microcomputer CPU32 BDM Cable	Windows 98/2000/ME/NT	C/C++, 68000 Assembly	ELF/DWARF; Motorola S-Record
CWCF	CodeWarrior Software Development Studio for ColdFire Embedded Systems	MCF5206e, MCF5307, MCF5407, MCF5272, MCF5249, MCF5282	Precise-MQX, Quadros-RTXC, Blunk-Target OS, KADAK-AMX, Micro Digital-SMX, ATI-Nucleus Plus	M5249C3; M5307C3; M5407C3; M5272C3; M5206eC3; M5282EVB	P&E Microcomputer ColdFire BDM Cable; Abatron BDI 2000	Windows 98/2000/NT/XP	C/C++, ColdFire Assembly	ELF/DWARF; Motorola S-Record
CWEPPC	CodeWarrior Development Studio, Embedded PowerPC ISA Edition	MPC555, MPC56x, MPC7xx, MPC74xx, MPC8xx, MPC82xx, PPC603, PPC603ei, MGT5100	Quadros RTXC, Embedix SDK, Precise MQX, ATI Nucleus	MPC8260, MPC8266, ADS Board, MPC857DSL IAD Board, MPC866/2/59 ADS, PQ27ADS Board, ADS-P, RPX Lite, RPX Classic, Motorola FADS MBX, Sandpoint, Cognet CMA 102, Axiom 555, Motorola ETAS555, Eximer, AMC Eval	MetroTRK, CodeTAP, PowerTAP, WireTAP Run Control Interface JTAG and BDM (8xx only), Macraigor Systems COP Raven (for MPC82xx and PPC6xx), Macraigor Systems BDM Raven (for MPC8XX, MPC5xx), Abatron BDI 2000 (5xx, 8xx, B2xx, 74xx), P&E Micro CABLEPPC (BDM only)	Windows 98/2000/NT/XP	C/C++, EC++, and PowerPC ISA Assembly	ELF/DWARF; Motorola S-Record
CWMCOE	CodeWarrior Software Development Tools for MCOE	M2xx/3xx family processors		MMC2001, MMC2075/2080, MMC2107, MMC2103, MMC3401, MMC2114	MetroTRK; Metrowerks EBDI	Windows 95/98/2000/NT	C/C++, Assembly	ELF/DWARF 1.0; Motorola S-Record

Other Software

Company	Product Name	Product Type
Bytecodes	Embedded Bytecode Interpreter	Optimized Java Virtual Machines
Counterpoint Systems Foundry	IrLite Development Kit	Infrared communications SDK
Precise Software Technologies	Various	Embedded I/O components
Grammar Engine	PromICE	Firmware development
Inverness Systems	ATIC	ATM protocols and applications
Micro APL	PortAsm	Porting tools that implement the PowerPC architecture ^(Note)
Pacific Softworks	Fusion	Internet protocols for Embedded Solutions
Sun Consumer Electronics	Internet Software Solution	Embedded Internet software
Total Impact	Total PowerSMPPCI	Multiprocessing application accelerator
US Software	USNET	Real-time embedded TCP/IP
Wind River Systems	SystemsWind	ViewSystem visualizer for embedded software

Note: Check with tool vendor for specific derivative support.

32-BIT EMBEDDED PROCESSORS

32-BIT EMBEDDED PROCESSORS (continued)

HARDWARE TOOLS

Metrowerks

Product	Description	Target Board	Power Supply	Schematic	Documentation	Interface Board/ Wiggler	RTOS Support
MPC823FADS	MPC823 FADS Board	•	•	•	•	•	•
MPC850SRFADS	MPC850 FADS Board	•	•	•	•	•	•
MPC8260ADS-PQ2	MPC8260 ADS Board	•	•	•	•	•	•
MPC860FADS	MPC860 FADS Board	•	•	•	•	•	•
MPC860TFADS	MPC860 TFADS Board	•	•	•	•	•	•
MPC862ADS	MPC862 ADS Board	•			•		
MPC862ADS-KITS	MPC862 ADS Board with Debugger and Host Software	•	•	•	•	•	•
MMCEVB1200PV	MMC2001 Low Cost Evaluation	•	•	•	•		
MMCEVB1200PV-A	MMC2001 Low Cost Evaluation Academic	•	•	•	•		
MMCCMB1200	MMC2001 Development Platform	•	•	•	•		
KITEVSMMC1200	MMC2001 High Performance System	•	•	•	•	•	
MMCEVB2107	MMC2107 Low Cost Evaluation	•	•	•	•		
MMCEVB2114	MMC2113/2114 Evaluation Board	•	•		•		•
MMCCMB2107	MMC2107 Development Platform	•	•	•	•		
MMCCMB2114	MMC2113/2115 Development Kit	•	•		•		•
KITEVSMMC2107	MMC2107 High Performance Kit	•	•	•	•	•	
KITEVSMMC2107	MMC2107 Complete Development Kit	•	•	•	•		
M5206EC3	MCF5206e Development Kit	•		•	•	•	•
M5307C3	MCF5307 Development Kit	•		•	•	•	•
M5407C3	MCF5407 Development Kit	•		•	•	•	•
M5272C3	MCF5272 Development Kit	•		•	•	•	•
M5249C3	MCF5249 Development Kit	•		•	•	•	•
MPC564EVB	MPC564 Evaluation Board	•	•	•	•	•	•
MPC566EVB	MPC566 Evaluation Board	•	•	•	•	•	•
MPC862ADS	MPC862 ADS Board	•			•		
MPC862ADS-KITS	MPC862 ADS Board with Debugger and Host Software	•	•	•	•	•	•
M5282EVB	MCF5282 Evaluation Board	•	•	•	•	•	•

32-BIT EMBEDDED PROCESSORS (continued)
DEVELOPMENT SYSTEMS

Metrowerks

Product	Description	RTOS Support	Debug Interface	Serial Cable	CD ROM	User Manuals	Power Supply	Host Platforms
CWDEVSYS5249	CodeWarrior Development System for ColdFire MCF5249	•	•	•	•	•	•	Windows 95/98/2000/NT
CWDEVSYS5272	CodeWarrior Development System for ColdFire MCF5272 ⁽¹⁾⁽²⁾	•	•	•	•	•	•	Windows 95/98/2000/NT
CWDEVSYS5407	CodeWarrior Development System for ColdFire MCF5407 ⁽¹⁾⁽²⁾	•	•	•	•	•	•	Windows 95/98/2000/NT
CWDEVSYS823FADS ⁽²⁾	CodeWarrior Development System for MPC823	•	•		•	•	•	Windows 98/2000/ME/NT/XP
CWDEVSYS850FADS ⁽²⁾	CodeWarrior Development System for MPC850	•	•		•	•	•	Windows 98/2000/ME/NT/XP
CWDEVSYS860FADS ⁽²⁾	CodeWarrior Development System for MPC860	•	•		•	•	•	Windows 98/2000/ME/NT/XP
CWDEVSYS860TFADS ⁽²⁾	CodeWarrior Development System for MPC860T	•	•		•	•	•	Windows 98/2000/ME/NT/XP
CWDEVSYS8260AMC ⁽²⁾	CodeWarrior Development System for MPC8260	•	•		•	•	•	Windows 98/2000/ME/NT/XP
CWCF5282ENDSEVL	CodeWarrior Embedded Networks for ColdFire M5282 with RTOS							Windows 98/2000/NT/XP
CWDSENA850EVL	CodeWarrior Embedded Networks for the MPC850 with Precise/MQX RTOS	•	•	•	•	•	•	Windows 98/2000/NT/XP
CWDSENA860EVL	CodeWarrior Embedded Networks for the MPC860 with Precise/MQX RTOS	•	•	•	•	•	•	Windows 98/2000/NT/XP
CWDSENA8260EVL	CodeWarrior Embedded Networks for the MPC8260 with Precise/MQX RTOS	•	•	•	•	•	•	Windows 98/2000/NT/XP
CWCF5272ENDSEVL	CodeWarrior Embedded Networks for the MCF5282 with RTOS	•	•	•	•	•	•	Windows 98/2000/NT/XP

(1) 12-month support plan available

(2) Contact Metrowerks for more information

32-BIT EMBEDDED PROCESSORS

CABLES AND HOST-TARGET INTERFACES

Metrowerks

Product/Part Number	Description	Target Support	Connection Device	Power Supply
CWWIRETAPBDM	AMC's WireTAP Run Control Interface (BDM)	•	•	•
CWWIRETAPJTAG	AMC's WireTAP Run Control Interface (MPC6xx, 7xx, 82xx, 74xx)	•	•	•
CWPOWERTAPJTAG	PowerTAP Pro for JTAG, Hardware Only	•	•	•
CWPTAPPROJCWW	PowerTAP Pro for JTAG with CodeWarrior for Windows	•	•	•
CWPTAPPROJMW	PowerTAP Pro for JTAG with MWX-ICE Windows	•	•	•
CWPTAPPROJMS	PowerTAP Pro for JTAG with MWX-ICE Solaris	•	•	•
CWPOWERTAPDPI	PowerTAP Pro for DPI, Hardware Only	•	•	•
CWPTAPPRODCWW	PowerTAP Pro for DPI, with CodeWarrior for Windows	•	•	•
CWPTAPPRODMW	PowerTAP Pro for DPI with MWX-ICE Windows	•	•	•
CWPTAPPRODMS	PowerTAP Pro for DPI with MWX-ICE Solaris	•	•	•

32-BIT EMBEDDED PROCESSORS (continued)

THIRD PARTY TOOLS

Third Party Vendor	Website	Families Supported	Embedded Operating Systems	Compilers and Code Generation Tools	Software Debuggers	Coverification Tools and Simulation Models	Emulators and Diagnostic Tools	Logic Analyzers	Boards and Systems	Support Chips	Drivers / Protocol Stacks
Abatron	www.abatron.ch	MCF53xx, MCF52xx, MCF54xx, MPC8xx, MPC82xx, G2, G3, G4					•				
Accelerated Technology	www.acceleratedtechnology.com	MPC8xx, MPC82xx, G2, G3	•		•						
Agilent Technologies	www.agilent.com	MPC8xx, MPC82xx, G2, G3, G4					•	•			
Aisys	www.aisysinc.com	MPC8xx, MPC82xx, G2		•							•
Apogee Software	www.apogee.com	G2, G3, G4		•							
Artis Microsystems	www.artismicro.com	G2, G4							•		
Blunk Microsystems	www.blunkmicro.com	MCF52xx, MPC8xx, MPC82xx, G4	•								•
CMX Systems	www.cmx.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
Cogent Computer Systems	www.cogcomp.com	MPC82xx, G2, G3							•		
Corelis	www.corelis.com	G2, G3, G4			•		•				
Data Connection	www.dataconnection.com	MPC8xx, MPC82xx									•
DY 4 Systems	www.dy4.com	G2, G3, G4							•		
Embedded Planet	www.embeddedplanet.com	MPC8xx, MPC82xx							•		
EmuTec	www.emutec.com	MPC8xx, MPC82xx, G2					•				
Express Logic	www.expresslogic.com	MPC8xx, MPC82xx, G2, G3	•								
Force Computers	www.forcecomputers.com	MPC8xx, MPC82xx, G3, G4							•		
GDA Technologies	www.gdatech.com	MPC8xx, MPC82xx, G4							•		
Green Hills Software	www.ghs.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•		•				
Hughes Network Systems	www.hns.com	MPC8xx									•
International Test Technologies	www.intertesttech.com	G2, G3					•				
Jungo	www.jungo.com	MC8xx									•
Kadak	www.kadak.com	MCF52xx, MCF5307, MCF54xx, MPC8xx, MPC82xx, G2, G3, G4	•		•						•
Lauterbach	www.lauterbach.com	MPC8xx, MPC82xx, G2, G3			•		•				
Lineo	www.lineo.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
LinuxWorks	www.linuxworks.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
MAI Logic	www.mai.com	G2, G3, G4							•	•	
Macraigor Systems	www.macraigor.com	MPC8xx, MPC82xx, G2, G3, G4			•		•				
Marvell Technology	www.marvell.com	G2, G3, G4							•	•	
Mentor Graphics	www.mentor.com	MPC8xx, MPC82xx, G2, G3	•	•	•	•					

32-BIT EMBEDDED PROCESSORS

THIRD PARTY TOOLS (continued)

Third Party Vendor	Website	Families Supported	Embedded Operating Systems	Compilers and Code Generation Tools	Software Debuggers	Coverification Tools and Simulation Models	Emulators and Diagnostic Tools	Logic Analyzers	Boards and Systems	Support Chips	Drivers / Protocol Stacks
MetaWare	www.metaware.com	MPC8xx, MPC82xx, G2, G3, G4		•	•						
Metrowerks	www.metrowerks.com	MGT5100, MPC8xx, MPC82xx, G2, G3, G4	•	•	•		•		•		•
MicroAPL	www.microapl.co.uk	G2, G3, G4		•							
Micro Digital	www.smxinfo.com	MCF52xx, MCF54xx, MPC8xx, MPC82xx, G2, G3	•		•						•
MicroWare	www.microware.com	MPC8xx, MPC82xx, G2, G3	•	•	•						
MontaVista Software	www.mvista.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
Motorola Computer Group	mcg.motorola.com	G2, G3, G4							•		
Motorola SPS	www.motorola.com/powerpc	MPC8xx, MPC82xx, G2, G3, G4				•			•	•	
MPI Software	www.mpi-softtech.com	G3, G4		•							
Netplane	www.netplane.com	MPC8xx									•
OnCore Systems	www.oncoresystems.com	MPC82xx, G2, G3	•		•						
OSE Systems	www.ose.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
Pacific-Sierra Research	www.psrv.com	G4		•							
PLX Technology	www.plxtech.com	MPC8xx, G2, G3, G4							•	•	
Precise Software Technologies	www.psti.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
PrimeLayer	www.primelayer.com	MPC8xx, MPC82xx									•
QNX Software Systems	www.qnx.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
Radstone Technology	www.radstone.com	G2, G3, G4							•		
Red Hat	www.redhat.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
Simpod	www.simpod.com	MPC8xx, MPC82xx, G2, G3, G4				•					
Sophia Systems	www.sophia.com	MPC8xx, MPC82xx, G2, G3			•		•				
Summit Design	www.summit-design.com	MPC8xx, MPC82xx, G2, G3, G4				•					
Sun	www.sun.com/chorusos	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
Synopsys	www.synopsys.com	MPC8xx, MPC82xx, G2, G3, G4				•					
TASKING	www.tasking.com	MPC8xx, MPC82xx, G2, G3		•	•						
Tektronix	www.tektronix.com	MPC8xx, MPC82xx, G2, G3, G4						•			
Tundra Semiconductor	www.tundra.com	MPC8xx, MPC82xx, G2, G3, G4							•	•	
US Software	www.ussw.com	MPC8xx, MPC82xx	•								•
Wasabi Systems	www.wasabisystems.com	G2, G3, G4	•	•	•						
Wind River Systems	www.windriver.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•		•		•		•

32-BIT EMBEDDED PROCESSORS (continued)

THIRD PARTY TOOLS

32-Bit Third Party Tools 68xxx, 683xx, MPC500, MCore, and ColdFire

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Assemblers						
Avocet Systems, Inc.		•				www.avocetsystems.com
Green Hills Software	•	•	•	•	•	www.ghs.com
P&E Microcomputer Systems, Inc.		•			•	www.pemicro.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
BDM Support Tools						
Cosmic Software		•				www.cosmic-software.com
Wind River Systems		•	•	•	•	www.wrs.com
Hitex Development Tools		•				www.hitex.com
Agilent Technologies, Inc.		•	•	•		www.agilent.com
iSystem		•		•		www.isystem.com
Lauterbach		•		•	•	www.lauterbach.com
Macraigor Systems LLC		•	•			www.macraigor.com
P&E Microcomputers, Inc.		•			•	www.pemicro.com
TASKING		•				www.tasking.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Code Coverage Tools						
Ashling Microsystems			•			www.ashling.com
Cosmic Software		•				www.cosmic-software.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
Hitex Development Tools		•				www.hitex.com
iSystem		•	•			www.isystem.com
TASKING		•		•		www.tasking.com
CodeTEST			•		•	www.metrowerks.com

32-BIT EMBEDDED PROCESSORS

32-BIT EMBEDDED PROCESSORS (continued)

THIRD PARTY TOOLS (continued)

32-Bit Third Party Tools 68xxx, 683xx, MPC500, MCore, and ColdFire (continued)

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Compilers						
Accelerated Technology Inc.		•	•		•	www.acceleratedtechnology.com
Byte Craft Limited				•		www.bytecraft.com
TASKING		•		•		www.tasking.com
Cosmic Software		•				www.cosmic-software.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
P&E Microcomputers, Inc.		•			•	www.pemicro.com
GNU	•				•	www.gnu.org
Metrowerks		•	•	•	•	www.metrowerks.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Debuggers						
Ashling Microsystems		•	•			www.ashling.com
Accelerated Technology Inc.		•	•	•	•	www.acceleratedtechnology.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
iSystem		•	•	•		www.isystem.com
Lauterbach	•	•	•	•	•	www.lauterbach.com
P&E Microcomputers, Inc.		•			•	www.pemicro.com
Metrowerks		•	•	•	•	www.metrowerks.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Evaluation Boards						
Axiom Manufacturing			•	•		www.axman.com
Arrow		•	•	•	•	www.arrow.com
Avnet		•	•	•	•	www.avnet.com
Future		•	•	•	•	www.future.com
Matrix Design Inc.					•	www.cadreiii.com
Metrowerks		•	•	•	•	www.metrowerks.com

32-Bit Third Party Tools 68xxx, 683xx, MPC500, MCore, and ColdFire (continued)

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Logic Analyzers						
Agilent Technologies, Inc.		•	•	•		www.agilent.com
iSystem		•				www.isystem.com
Tektronix		•	•	•		www.tek.com/measurement/logic_analyzers
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
In-Circuit Emulators or Hardware Debug Interface						
Ashling Microsystems		•	•			www.ashling.com
Wind River Systems		•	•		•	www.wrs.com
Hitex Development Tools		•				www.hitex.com
iSystem		•	•			www.isystem.com
Lauterbach		•	•		•	www.lauterbach.com
Microtek International Inc.		•			•	www.microtek.com.tw/mice
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Performance Analysis Tools						
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
iSystem		•	•			www.isystem.com

32-BIT EMBEDDED PROCESSORS

32-Bit Third Party Tools 68xxx, 683xx, MPC500, MCore, and ColdFire (continued)

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Real-Time Operating Systems						
Accelerated Technology Inc.	•	•	•	•	•	www.atinucleus.com
Quadros Systems		•	•	•	•	www.metrowerks.com
ETAS		•	•			www.etasinc.com
Green Hills Software	•	•	•	•	•	www.ghs.com
ARC International	•	•	•	•	•	www.metrowerks.com
Snap Gear					•	www.snapgear.com
TASKING		•				www.tasking.com
U S Software		•	•		•	www.ussw.com
Wind River Systems	•				•	www.wrs.com
Blunk Microsystems	•	•	•	•	•	www.blunkmicro.com
Kadak	•	•	•		•	www.kadak.com
Micro Digital			•		•	www.smxinfo.com

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Simulation Tools						
Wind River Systems	•	•		•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
TASKING		•		•		www.tasking.com

**ANALOG
DEVELOPMENT SYSTEMS**

Development Tools — Communications Application-Specific Standard Products

Product	Description	Key Product	Status	Documentation
MC14LC5480EVK	PCM Codec-Filter Evaluation Kit	MC14LC5480, MC145481, MC145482, MC145483, MC145484	Available	MC14LC5480EVK/D
MC145572EVK	ISDN U-Interface Transceiver Evaluation Kit	MC145572	Available	Note
MC145574EVK	ISDN S/T-Interface Transceiver Evaluation Kit	MC145574	Available	Note
MC145576EVK	ISDN Single-Chip NT1 Evaluation Kit	MC145576	Available	Note
MC145576DRV	Driving Board for the MC145576EVK for Smart NT1 Evaluation	MC145576	Available	Note
Hipster™	Hipster Reference Design for SOHO Router	MC145572, MC145574, MPC850DH	Available	Note

Note: For documentation, go to www.motorola.com/semiconductors, and click on the Tools Library link.

DIGITAL SIGNAL PROCESSORS

DSP56800/DSP56800E Development Tools - Software

Product	Description	Status
MSW3SDK000AA	Embedded software development kit (SDK) for DSP56800/56800e. Software infrastructure that allows development of efficient, high level software applications that are fully portable and reusable not only across all DSP56800/DSP56800E family processors, but any future SDK supported architectures as well.	Available
CWDSPEC	CodeWarrior Analysis Tools for DSP56800E (Metrowerks)	Available
CWDSP56800	CodeWarrior Software Development Tools for DSP56800 (Metrowerks)	Available
CWDSP56800E	CodeWarrior Software Development Tools for DSP56800E (Metrowerks)	Available
CWDSPETBDKEY	CodeWarrior Turbo Downloader for DSP56800E (Metrowerks)	Available
CWSTARCOREWIN	CodeWarrior Software Development Tools for StarCore (Windows) (Metrowerks)	Available
CWSTARCORESOL	CodeWarrior Software Development Tools for StarCore (Solaris) (Metrowerks)	Available
PP-JTAG	JTAG controller with Printer Port Interface and software supporting production FLASH programming	Available
DSPOSRTOS	DSP OS Real-Time Operating System (RTOS)	Available
DSPOSNET	DSP OS Network Software	Available
RTXC Quadros	RTXC Quadros Real-Time Operating System (RTOS)	Available
RTXC Quadnet	RTXC Quadnet Networking Protocol Suite	Available
DSP56852SFP	DSP56852 with Feature Phone Application	Available
DSP56858SFP	DSP56858 with Feature Phone Application	Available

DSP56800 Development Tools - Hardware

Product	Description	Status
DSP56800TDC1	Daughter Card for DSP56F826EVM and DSP56F827EVM	Available
DSP56F801EVM	Evaluation kit for the DSP56F801 and DSP56F802 processor (Metrowerks)	Available
DSP56F803EVM	Evaluation kit for the DSP56F803 processor (Metrowerks)	Available
DSP56F805EVM	Evaluation kit for the DSP56F805 processor (Metrowerks)	Available
DSP56F807EVM	Evaluation kit for the DSP56F807 processor (Metrowerks)	Available
DSP56F826EVM	Evaluation kit for the DSP56F826 processor (Metrowerks)	Available
DSP56F827EVM	Evaluation kit for the DSP56F827 processor (Metrowerks)	Available
DSPCOMMPARALLEL	Emulation support for DSP56F80X processors. Requires parallel port (Metrowerks)	Available
DSPCOMMANDPCI	Emulation support for DSP56F80X processors. Requires PCI slot (Metrowerks)	Consult Web or Metrowerks for availability of CodeWarrior software support
DSPCOMMETHERNET	Emulation support for DSP56F80X processors. Requires Ethernet network	Consult Web or Metrowerks for availability of CodeWarrior software support
DSPOSRTOS	DSP OS Real-Time Operating System (RTOS)	Available

DSP56800 Development Tools - Hardware (continued)

Product	Description	Status
ECINLHIVSR	3-Phase Switched Reluctance High-Voltage Power Stage	Available
ECLOVACBLDC	3-Phase BLDC Low-Voltage Power Stage	Available
ECLOVSR	3-Phase Switched Reluctance Low-Voltage Power Stage	Available
ECMTREVAL	Evaluation Motor Board	Available
ECOPT	Optoisolation Board	Available
ECOPTINL	In-Line Optoisolation Box	Available
ECCTR908MR32	MC68HC908MR32 Control Board	Available
ECOPTHVACBLDC	3-Phase AC BLDC High-Voltage Power Stage	Available

DSP56800E Development Tools - Hardware

Product	Description	Status
DSP56852EVM	Evaluation Kit for DSP56852 Processor	Available
DSPCOMMPARALLEL	Parallel Port Command Converter for DSP	Available
DSPCOMMETHERNET	Ethernet Command Converter for DSP	Available
DSPCOMMANDPCI	PCI Command Converter for DSP	Available
DSPCOMMAND	Universal Command Converter for DSP	Available
DSP56858EVM	Evaluation Kit for DSP56858 Embedded Systems	Available
DSP56800TDC1	Daughter Card for DSP56852EVM and DSP56858EVM	Available
HTIONCEJTAG	CodeWarrior HTI for OnCE/JTAG Communication (supports DSP56800E)	Available

DSP56300 Family and MSC8100 Family Development Systems

Product	Description	Status
DSPTOOLSCD	DSP56300 Family Simulator/Assembler/Librarian for IBM PC, SUN-4, and Hewlett-Packard Series 700. DSPTOOLSCD is only available as a download from Metrowerks at www.metrowerks.com/embedded/suite56 .	Available
CDDSP56300/D	DSP56300 Training CD	Available
DSP56301ADM	DSP56301 Applications Development Module	Available
DSP56303EVM	DSP56303 Evaluation Module	Available
DSP56L307EVM	DSP56L307 Evaluation Module	Available
DSP56309EVM	DSP56309 Evaluation Module	Available
DSP56311EVM	DSP56311 Evaluation Module	Available
DSP56321EVM	DSP56321 Evaluation Module	Available
DSPAUDIOEVMMB1	DSP5636x Evaluation Module (Daughter Card listed separately)	Available

DSP56300 Family and MSC8100 Family Development Systems (continued)

Product	Description	Status
DSPB56362DB1	DSPB56362DB1 Evaluation Module Daughter Card	Available
DSPF56362DB1	DSPF56362DB1 Dolby and DTS Licensing Required	Available
DSPB56364DB1	DSPB56364DB1 Evaluation Module Daughter Card	Available
DSPB56366DB1	DSPB56366DB1 Evaluation Module Daughter Card	Available
DSPD56366DB1	DSPD56366DB1 Dolby and DTS Licensing Required	Available
DSPB56367DB1	DSPB56367DB1 Evaluation Module Daughter Card	Available
DSPA56367DB1	DSPA56367DB1 Dolby and DTS Licensing Required	Available
DSPC56367DB1	DSPC56367DB1 Dolby and DTS Licensing Required	Available
MSC8101ADS	MSC8101 Application Development System Board (Metrowerks)	Available
DSPCOMMAND	16-, 24-, 32-bit Command Converter Board, which allows the host to talk with DSP target system via OnCE/JTAG port. Either a DSPPCHOST or DSPSUN4HOST is required with the DSPCOMMAND.	Available
DSPPCHOST	PC-Compatible Host Interface Board	Available
DSPSUN4HOST	Sun-4 Host Interface Board	Available
DSPCOMMANDPCI	Command Converter with PCI Host Interface	Available
DSPCOMMETHERNET	Command Converter with Ethernet Host Interface	Available
DSPCOMMPARALLEL	Command Converter with Parallel Port Host Interface	Available
HTIONCEJTAG	Panther HTI for OnCE/JTAG Communication. CodeWarrior for StarCore Windows/Solaris	Available
CWDSSTAR8101-WIN	MSC8101 Application Development System for Windows (Metrowerks)	Available
CWDSSTARWIN	Development System with Panther for Windows (Metrowerks)	Available
CWSTARCOREWIN	Metrowerks CodeWarrior Software Development Tools for StarCore v.1.1 (Windows) (Metrowerks)	Available
CWSTARCORESOL	Metrowerks CodeWarrior Software Development Tools for StarCore v.1.1 (Solaris) (Metrowerks)	Available
CWDSSTAR8101-SOL	MSC8101 Application Development System for Solaris	Available
CWDSSTARSOL	Development System with Panther for Solaris	Available
CWMSC8101ADSEVAL	CodeWarrior Development System for MSC8101ADS	Evaluation Edition
CWMSC8101EVMEVAL	CodeWarrior Development System for MSC8101EVM	Evaluation Edition

DSP56300 and MSC8100 Development Tools - Software

Tools Description	Partner	Contact
Real-Time Operating System	Eonic Systems Embedded Power Corporation Quadros Systems, Inc. OSE Systems Precise Software Technologies Wind River Systems	www.eonics.com www.embeddedpower.com www.quadros.com www.ose.com www.psti.com www.windriver.com
Integrated Development Environment	Green Hills Software Metrowerks Signalogic TASKING	www.greenhills.com www.metrowerks.com www.signalogic.com www.tasking.com
Optimizing Compilers / Assembler / Linker	Green Hills Software Metrowerks TASKING Wind River Systems	www.greenhills.com www.metrowerks.com www.tasking.com www.windriver.com
Debugger	Domain Technologies Green Hills Software Metrowerks Precise Software Technologies TASKING Wind River Systems	www.domaintec.com www.greenhills.com www.metrowerks.com www.psti.com www.tasking.com www.windriver.com
Simulator	Metrowerks Precise Software Technologies TASKING Wind River Systems	www.metrowerks.com www.psti.com www.tasking.com www.windriver.com
DSP Algorithm Development	Mathworks Hyperception	www.mathworks.com www.hyperception.com
System Simulation and Verification	Cadence Mentor Graphics Synopsys	www.cadence.com/alta www.mentorgraphics.com www.synopsys.com
Hardware Debug Connections / Analyzers	Corelis/HP Macraigor Systems Metrowerks Signalogic Wind River Systems	www.corelis.com www.macraigor.com www.metrowerks.com www.signalogic.com www.windriver.com
Hardware Development Tools	CDA Systems P&E Microcomputer Systems United Electronic Industries White Electronic Designs	www.cdasy.com www.pemicro.com www.ueidaq.com www.whiteedc.com
Device Driver Software	Aisys Motorola I/O Driver Library for MSC8101	www.aisysinc.com www.motorola.com/DSP

MICROCONTROLLERS

MICROCONTROLLERS SOFTWARE TOOLS

HC05, HC08, HC11, HC12, HC16, MPC5xx, 568xx, and MCORE — Metrowerks

Product	Description	Target Support	RTOS Support	Board Support	Host-Target Interface	Host Platforms	Language Support
CWHC05ASM	CW ASM Tools for HC05	HC05 family processors (B, BD, C, F, J, JB, JJ, JP, K, KJ, L, LJ, P, PV, SR, SU and X families)	—	MMEVS, MMDS	—	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWHC05	CW Full Package for HC05	HC08 family processors (AB, AS, AZ, EY, GP, GR, GT, JB, JK, JL, JG, QT, QY, KX, LJ, MR, RF, RK, SR families)	—	MMEVS, MMDS	—	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWHC11ASM	CW ASM Tools for HC11	HC11 family processors (D, E, F, FC, K, KS, KW and P families)	—	—	Monitor	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWHC11	CW Full Package for HC11	HC11 family processors (D, E, F, FC, K, KS, KW and P families)	—	—	Monitor	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWHC11MIG	CW Full Package for HC11 Migration	HC11 family processors (D, E, F, FC, K, KS, KW and P families)	Metrowerks OSEKturbo OS H	—	Monitor	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWHC16ASM	CW ASM Tools for HC16	HC16 family processors (R, X, Y, and Z families)	—	—	P&E ICD, Abatron BDI, Lauterbach BDM	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWHC16	CW Full Package for HC16	HC16 family processors (R, X, Y, and Z families)	—	—	P&E ICD, Abatron BDI, Lauterbach BDM	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWHC16MIG	CW Full Package for HC16 Migration	HC16 family processors (R, X, Y, and Z families)	—	—	P&E ICD, Abatron BDI, Lauterbach BDM	Windows 95/98/2000/ ME/NT4.0	Assembly, C/C++, cC++, EC++
CWMCORE	CodeWarrior Software Development Tools for MCORE	M2xx/3xx family processors	—	MMC2001; MMC2075/2080; MMC2107, MMC2103, MMC3401	MetroTRK; Metrowerks EBDI	—	—

MICROCONTROLLERS (continued)

DEVELOPMENT SYSTEMS

MON08 CYCLONE

The MON08 Cyclone provides all the capabilities of the MON08 Multilink plus the ability to function as a stand-alone programmer with push buttons and LEDs to control operation.

Cyclone Hardware

- Fast in-circuit stand-alone programming
 - Simple push button and LED user interface
- Host-based programming with scripting capability to execute a series of commands
 - Automated programming of test routines, test execution, erase, and final software programming
- Real-time in-circuit emulation and debug
- Auto-detects baud rate and frequency
- Provides optional overdrive clock to target
- Supports 2 V to 5.5 V 68HC08s
- Automatically cycles power for security checks (up to 500 mA)
- Universal power supply
- Includes CodeWarrior Development Studio for HC08, Special Edition

The order number for this product is M68CYCLONE08 (M68CYCLONE-EUR in Europe).

68HC908QT4 DEMONSTRATION BOARD

The 68HC908QT4 demonstration kit contains everything a designer needs to develop and evaluate applications for the Q Family of M68HC08 Microcontrollers.

Features

- Evaluation board with a 4K FLASH 68HC908QT4 8-pin MCU
- Tutorial and demonstration code including A/D, timer, PWM, and keyboard interrupt routines to help you learn the 68HC908QT Family quickly
- Free Special Edition Code Warrior Development Suite for HC08, allowing you to:
 - Modify demo code or develop new code for the 68HC908QT4 in assembly or C
 - Program and debug code through DB9 serial port and included RS232 serial cable

The order number for this product is M68DEMO908QT4.

MON08 MULTILINK

The MON08 Multilink is an easy to use low-cost development tool for Motorola's 68HC08 FLASH MCUs. The MON08 Multilink provides in-circuit emulation, debugging, and programming through the 68HC08's standard MON08 serial debug/breakpoint interface.

Some of the features that help make the MON08 Multilink such a versatile, time-saving tool are:

Universal development tool for all MON08 68HC08s

- Real-time in-circuit emulation and debug
- Fast in-circuit programming
- Auto-detects baud rate and frequency
- Provides optional overdrive clock to target
- Small unobtrusive size (approximately 3" x 2" x 3/4")
- Supports 2 V to 5.5 V 68HC08s
- Automatically cycles power for security checks (up to 125 mA)
- Universal power supply
- Includes CodeWarrior Development Studio for HC08, Special Edition

Complete with sample of 68HC908GP32 FLASH MCU and comprehensive documentation

The order number for this product is M68MULTILINK08 (M68MULTILINK08-E in Europe).

MICROCONTROLLERS

MICROCONTROLLERS (continued)

DEVELOPMENT SYSTEMS (continued)

In-Circuit Simulator (ICS) Kits

Economical, Integrated Developing and Debugging

Motorola's in-circuit simulator kits are low-cost tools for developing and debugging target systems incorporating Motorola's most popular 68HC05 and 68HC08 MCUs. They provide an innovative interface to a user's target system for Windows-based editing, assembly, software simulation, programming, and in-circuit simulation. In-circuit simulation allows you to use the actual inputs and outputs of your target system during simulation of your code.

Features:

- Windows-based integrated development environment (IDE) with editor, assembler, debugger, and simulator:
 - Run under Windows 3.x[®]/Windows 98[®]
 - Examine and modify memory, registers, and I/O
 - Up to 64 instruction and register (accumulator, stack, index) break points
 - Several single-stepping and run modes of execution
 - Trace buffer holds previously executed instructions and variables
 - Data variable display window
 - Simulates all I/O, interrupts, timers, and other on-chip hardware
 - Detects attempted use of uninitialized or unimplemented locations
 - Data logging and script commands for recording and automatic execution of a sequence of commands
 - On-screen context-sensitive Windows help
- In-circuit simulation:
 - Emulation cable for connection to target system
 - Non-realtime in-circuit emulation
- Program EPROM, OTP, EEPROM, and FLASH microcontrollers

Kit Contents:

- Windowed EPROM or FLASH MCU sample
- Comprehensive documentation:
 - MCU technical data books
 - Software and hardware user's manual
 - Application guide/text book
 - MCU technical documentation CD-ROM
- Serial cable for PC to ICS connection
- Wall-mount power supply

Added Capabilities of the 68HC08 ICS Kits:

- Real-time in-circuit emulation available except for clock control and communication
- Real-time in-circuit debug using the 68HC08's MON08 serial debug/breakpoint capability
- Includes CodeWarrior Development Studio for HC08, Special Edition

	In Support of	Motorola Part Number
68HC705B16		M68ICS05B
68HC705C8A/C9A		M68ICS05C
68HC705JP7/JJ7		M68ICS05JP
68HC705KJ1/J1A		M68ICS05KJ
68HC705P6A		M68ICS05P
68HC908AB32		M68ICS08AB
68HC908AZ60A/AS60A		M68ICS08ASAZ
68HC908GP32		M68ICS08GPGT
68HC908GR4/GR8		M68ICS08GR
68HC908JB16/JG16		M68ICS08JB.JG
68HC908JB8		M68ICS08JB
68HC908JL3/JK3/JK1/JK8/JL8		M68ICS08JLJK
68HC908KX8/KX2		M68ICS08KX
68HC908LJ12		M68ICS08LJ
68HC908MR8/MR16/MR32		M68ICS08MR
68HC908RK2		M68ICS08RK2
68HC908SR12		M68ICS08SR
68HC908GT8/16		M68ICS08GPGT

MICROCONTROLLERS (continued)
DEVELOPMENT SYSTEMS (continued)
Modular Evaluation System (MMEVS) Kits

The Motorola modular evaluation system (MMEVS) is Motorola's economical, two-board emulator for the 68HC(7)05 and 68HC(9)08 Families of microcontrollers. The MMEVS consists of a platform board and an emulator module (EM). Connected to your target system, the emulator replicates the actual target system MCU. An integrated development environment (IDE) allows for quick edits and changes to assembly code, which makes design, debug, and real-time evaluation of the target system as efficient as possible. Use this economical system to perform traditional debugging activities such as executing code in run or step mode, setting break points, monitoring or modifying CPU registers, memory and application variables, and creating log or script files to record test results or create test suites.

Features:

- Real-time, non-intrusive, in-circuit emulation at the MCU's operating frequency
- 64 hardware break points
- Control of code execution in run or step mode
- 64K bytes of fast emulation memory (SRAM)
- Current-limited target input/output connections
- 6 software-selectable oscillator clock sources
- Command and response logging to save session history and/or to generate script files
- SCRIPT command for automatic execution of a sequence of commands (such as system configuration setup and automated test runs)
- Assembly source-level debugging
- Host/emulator communication speeds as high as 57,600 baud
- Extensive on-line MCU information via the CHIPINFO command
- Includes CodeWarrior Development Studio for HC08, Special Edition

Kit Contents:

- MMEVS platform board (M68MMPFB0508):
 - IDE (including editor, assembler, debugger)
 - 9-lead RS-232 serial cable
 - 9- to 25-pin serial cable adapter
 - MMEVS user's manuals
 - Power supply
- Device-specific emulation module
- Device- and package-specific target cables/adapters
- In-circuit simulation and programming kit (ICS)

In Support of	Motorola Part Number
68HC705B16	KITMMEVS05B
68HC705C8A/C9A	KITMMEVS05C
68HC705JP7/JJ7	KITMMEVS05JP
68HC705KJ1/J1A	KITMMEVS05KJ
68HC705P6A	KITMMEVS05P6A
68HC908AB32	KITMMEVS08AB32
68HC908AZ60A/AS60A	KITMMEVS08ASAZ
68HC908EY16	KITMMEVS08EY KITMMEVS08EY-E (in Europe)
68HC908GP32	KITMMEVS08GPGT
68HC908GR4/GR8	KITMMEVS08GR
68HC908GR16/GZ16/GZ8	KITMMEVS08GZ16 KITMMEVS08GZ16-E (in Europe)
68HC908JB16/JG16	KITMMEVS08JB.JG
68HC908JB8	KITMMEVS08JB8
68HC908JL3/JK3/JK1/JK8/JL8	KITMMEVS08JL
68HC908KX8/KX2	KITMMEVS08KX
68HC908LJ12	KITMMEVS08LJ
68HC908MR16/MR32	KITMMEVS08MR32
68HC908QT1/QT2/QT4/QY1/QY2/QY4	KITMMEVS08QTQY KITMMEVS08QTQY-E (in Europe)
68HC908SR12	KITMMEVS08SR12
68HC908GT8/16	KITMMEVS08GPGT

MICROCONTROLLERS (continued)

DEVELOPMENT SYSTEMS (continued)

Modular Development System (MMDS) Kits

The Motorola modular development system (MMDS) is a full-featured emulator system for developing embedded systems using 68HC(7)05 and 68HC(9)08 microcontrollers. In addition to incorporating the debug features of the Motorola modular evaluation system (MMEVS), the MMDS adds advanced features such as real-time, dual-ported memory and a bus state analyzer to capture user-defined bus cycles or events. Use the dual-ported memory to tune filter circuits or monitor changes to program variables while your program is running at full speed. Verify nested or complex program flows using the bus state analyzer's full range of sequenced or logical event triggering and data capture modes. These added features help users develop, debug, and deliver 68HC05 or 68HC08 products in less time.

Features:

- Real-time, non-intrusive, in-circuit emulation at the operating frequency of the target device
- Control of code execution in run or step mode
- Real-time bus state analyzer:
 - 8K x 64 real-time trace buffer
 - Display of real-time trace data
 - Four hardware triggers
 - Nine triggering modes
 - up to 8190 pre- or post-trigger points for trace data
 - 16 general-purpose logic chips
 - 16-bit time tag, or optional 24-bit time tag
- 4 complex break points (any combination of address, data, control, and/or I/O)
- 64 instruction break points
- 32 real-time variables
- 32 bytes of real-time memory
- 64K bytes of fast emulation memory (SRAM)
- Current-limited target input/output connections
- 6 software-selectable oscillator clock sources
- Command and response logging to save session history and/or to generate script files
- SCRIPT command for automatic execution of a sequence of commands (such as system configuration setup and automated test runs)
- Host/emulator communications speeds as high as 57,600 baud
- Extensive on-line device information via CHIPINFO command
- Includes CodeWarrior Development Studio for HC08, Special Edition

Contents:

- MMDS Station module with built-in power supply (M68MMDS0508):
 - 39 cm deep x 25.9 cm wide x 7 cm high
 - Two logic clip cable assemblies
 - 9-lead RS-232 serial cable
 - 9- to 25-pin serial cable adapter
 - IDE with editor, assembler, and debugger
 - Device-specific emulation module
 - Device- and package-specific target cables/adapters
- In-circuit simulation and programming kit (ICS)

In Support of	Motorola Part Number
68HC705B16	KITMMDS05B
68HC705C8A/C9A	KITMMDS05C
68HC705JP7/JJ7	KITMMDS05JP
68HC705KJ1/J1A	KITMMDS05KJ
68HC705P6A	KITMMDS05P6A
68HC908AB32	KITMMDS08AB32
68HC908AZ60A/AS60A	KITMMDS08ASAZ
68HC908EY16	KITMMDS08EY KITMMDS08EY-E (in Europe)
68HC908GP32	KITMMDS08GPGT
68HC908GR4/GR8	KITMMDS08GR
68HC908GR16/GZ16/GZ8	KITMMDS08GZ16 KITMMDS08GZ16-E (in Europe)
68HC908JB16/JG16	KITMMDS08JBJG
68HC908JB8	KITMMDS08JB8
68HC908JL3/JK3/JK1/JK8/JL8	KITMMDS08JL
68HC908KX8/KX2	KITMMDS08KX
68HC908LJ12	KITMMDS08LJ
68HC908MR16/MR32	KITMMDS08MR32
68HC908QT1/QT2/QT4/QY1/QY2/QY4	KITMMDS08QTQY KITMMDS08QTQY-E (in Europe)
68HC908SR12	KITMMDS08SR12
68HC908GT8/16	KITMMDS08GPGT

MICROCONTROLLERS (continued) DEVELOPMENT SYSTEMS (continued)

CodeWarrior Development Studio for HC08, Special Edition

This comprehensive special edition toolset combines the best from Motorola, Metrowerks, and leading third-party developers and is bound to establish a new standard with the included components for fast and easy MCU development.

Features:

- Industry-leading CodeWarrior Integrated Development Environment
 - Project manager for up to 32 files
 - Built-in “stationary” templates with example assembly and C code to help create new projects faster
- Full-chip simulation and Flash programming with P&E Microcomputer Systems technology
- Assembler, linker, and assembly source level debugger supports all 68HC08 MCUs
- Highly optimized ANSI C compiler and C source level debugger for many of Motorola’s most popular 68HC08 MCUs
 - Fully supports the 68HC908JL3, JK3, JK1, KX2, GR4, RK2, RF2, QT4, QT2, QT1, QY4, QY2, QY1, and future derivatives with less than 4 kB of memory
 - Over 60 optimization strategies specifically designed to boost performance and reduce code size
- Processor Expert™ rapid application design tool from UNIS
 - Provides optimized and tested automatic C code generation for most 68HC08 on-chip peripherals to dramatically reduce development time and improve code quality
 - Helps to eliminate time spent on low-level details, which allows more time for adding value to system solution
 - Promotes reusability and easy system configuration
 - Verifies design based on actual MCU resources and timing contentions to help catch potential problems before you begin debugging
- Fully supports Motorola’s 68HC08 hardware development tools
 - MMDS, MMEVS, ICS, Cyclone, and MON08 Multilink

The special edition software is available on CD-ROM and for download from www.motorola.com/mcu

C Compiler

The special edition is a full-featured toolset with a 4K code size limited version of our highly optimized C compiler. You can upgrade to a 32K version or an unlimited 64K version to support all HC(S)08s. Both upgrades have project management for greater than 32 files.

The order number is CWHC08C32UPG (32K version)
CWHC08C64UPG (64K version)

Standard Edition

The standard edition includes an unrestricted C compiler, project management for greater than 32 files, unlimited data visualization tools to ease debugging, and access to an additional 170-plus software-only objects for the Processor Expert design tool.

The order number for this product is CWHC08STD.

Professional Edition

The professional edition provides the following additional advanced tools to speed your design to market:

- Code coverage analysis allows the user to isolate unused or badly used portions of code
- Profiler/performance analysis to identify and optimize critical portions of code
- Software trace/logic analyzer, combined with breakpoints, to quickly isolate complex problems
- Additional advanced objects for the Processor Expert design tool, including support for complex communication modules such as CAN
- Processor Expert Wizard that allows design of custom beans
- OSEK awareness
- I-Logix Rhapsody in MicroC interface

The order number for this product is CWHC08PRO.

CodeWarrior Development Studio for HCS12, Special Edition

This comprehensive special edition toolset combines the best from Motorola, Metrowerks, and leading third-party developers and is bound to establish a new standard with the included components for fast and easy MCU development.

Features:

- Industry-leading CodeWarrior Integrated Development Environment
 - Project manager for up to 32 files
- Built-in “stationary” templates with example assembly and C code to help create new projects faster
- CPU and timer simulation
- Flash programming
- Assembler, linker, and assembly source level debugger supports all HCS12 MCUs
- Highly optimized ANSI C compiler and C source level debugger for up to 12K-bytes code size
 - Over 60 optimization strategies specifically designed to boost performance and reduce code size
 - Upgrades to support larger memory HCS12s available
- Processor Expert™ rapid application design tool from UNIS
 - Provides optimized and tested automatic C code generation for most HCS12 on-chip peripherals to dramatically reduce development time and improve code quality
 - Helps to eliminate time spent on low-level details, which allows more time for adding value to system solution
 - Promotes reusability and easy system configuration
 - Verifies design based on the actual MCU resources and timing contentions to help catch potential problems before you begin debugging
- Fully supports Motorola’s HCS12 hardware development tools
 - Cyclone Pro and BDM Multilink

The special edition software is available on CD-ROM and for download from www.motorola.com/mcu

The order number for this product is CDCWSEHC12/D.

C Compiler

The special edition is a full-featured toolset with a 12K-byte code size limited version of our highly optimized C compiler. Upgrade to a 32K-byte version, a 64K-byte version, or an unrestricted version to support any HCS12. All upgrades have project management for greater than 32 files.

The order number is CWHC12C32UPG (32K version)
CWHC12C64UPG (64K version)

Standard Edition

The standard edition includes an unrestricted C compiler, project management for greater than 32 files, unlimited data visualization tools to ease debugging, and access to an additional 170-plus software-only objects for the Processor Expert design tool.

The order number for this product is CWHC12STD.

Professional Edition

The professional edition provides the following additional advanced tools to speed your design to market:

- Code coverage analysis allows the user to isolate unused or badly used portions of code
- Profiler/performance analysis to identify and optimize critical portions of code
- Software trace/logic analyzer, combined with breakpoints to quickly isolate complex problems
- Additional advanced objects for the Processor Expert design tool, including support for complex communication modules such as CAN
- Processor Expert Wizard that allows design of custom beans
- OSEK awareness
- I-Logix Rhapsody in MicroC interface

The order number for this product is CWHC12PRO.

MICROCONTROLLERS (continued)

HARDWARE TOOLS

68HC05 Emulators, Cables, and Adapters

Product	Platform	Emulation Modules	Packages Supported	Flex Cable	Target Head Adapter	Surface Mount Adapter
68HC05B6/B8/B16/B32 68HC705B16N/B32	M68MMPFB0508 or M68MMDS0508	M68EM05B32	56-pin SDIP (B) 64-pin QFP (FU) 52-pin PLCC (FN)	M68CBL05B M68CBL05C M68CBL05C	M68TB05B32B56 M68TC05B32FU64 M68TC05B32FN52	M68TQP064SA1 ⁽¹⁾ M68TQS064SAG1 ⁽¹⁾
68HC05BD3/BD5/BD7 68HC705BD3/BD7	M68MMPFB0508 or M68MMDS0508	M68EM05BD7	40-pin DIP (P) 42-pin SDIP (B)	M68CBL05B M68CBL05B	M68TB05BD7P40 M68TB05BD7B42	
68HC05BD9/BD16/BD24 68HC705BD9/BD24	M68MMPFB0508 or M68MMDS0508	X68EM05BD9	40-pin DIP (P) 42-pin SDIP (B)	M68CBL05B M68CBL05B	M68TB05BD9P40 M68TB05BD9B42	
68HC05C4A/C8A/C12A 68HC705C8A	M68MMPFB0508 or M68MMDS0508	M68EM05C9A	40-pin DIP (P) 44-pin PLCC (FN) 44-pin QFP (FB) 42-pin SDIP (B)	M68CBL05B M68CBL05C M68CBL05C M68CBL05B	M68TB05C9P40 M68TC05C4FN44 M68TC05C9FB44 M68TB05C9B42	M68TQS044SAG1 ⁽¹⁾ M68TQP044SAMO1 ⁽¹⁾
68HC05C9A 68HC705C9A	M68MMPFB0508 or M68MMDS0508	M68EM05C9A	40-pin DIP (P) 44-pin PLCC (FN) 42-pin SDIP (B) 44-pin QFP (FB)	M68CBL05B M68CBL05C M68CBL05B M68CBL05C	M68TB05C9P40 M68TC05C9FN44 M68TB05C9B42 M68TC05C9FB44	M68TQS044SAG1 ⁽¹⁾ M68TQP044SAMO1 ⁽¹⁾
68HC05E6 68HC705E6	M68MMPFB0508 or M68MMDS0508	M68EM05E6	28-pin SOIC (DW) 44-pin QFP (FB)	M68CBL05C M68CBL05C	M68TC05E6P28 M68TC05E6FB44	M68DIP28SOIC M68TQS044SAG1 ⁽¹⁾ M68TQP044SAMO1 ⁽¹⁾
68HC705F32	M68MMPFB0508 or M68MMDS0508	M68EM05F32	100-pin TQFP (PU) 80-pin TQFP (PU)	M68CBL05E M68CBL05E	M68TE05F32PU100 M68TE05F32PU80	
68HC05H12 68HC705H12	M68MMPFB0508 or M68MMDS0508	X68EM05H12	52-pin PLCC (FN)	M68CBL05C	X68TC05H12FN52	
68HC05J5A 68HC05LJ5 68HC705J5A	M68MMPFB0508 or M68MMDS0508	X68EML05J5A	16-pin DIP (P) 20-pin DIP (P) 16-pin SOIC (DW) 20-pin SOIC (DW)	M68CBL05A M68CBL05A M68CBL05A M68CBL05A	M68TA05J5AP16 M68TA05J5AP20 M68TA05J5AP16 M68TA05J5AP20	M68DIP16SOIC M68DIP20SOIC

1. Each QFP target head adapter includes one TQSOCKET with guides (M68TQSxxxSyG1) and one TQPACK disposable surface mount adapter (M68TQPxxxSy1 – 1.2-mm lead length or M68TQPxxxSyM01 – 1.6-mm lead length). Order additional TQPACKs and TQSOCKETs (optional) using part numbers referenced in the Surface Mount Adapters column to support multiple target systems.

MICROCONTROLLERS

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC05 Emulators, Cables, and Adapters (continued)

Product	Platform	Emulation Modules	Packages Supported	Flex Cable	Target Head Adapter	Surface Mount Adapter
68HC705JB3	M68MMPFB0508 or M68MMDS0508	X68EM05JB3	20-pin DIP (P) 28-pin DIP (P) 28-pin SOIC (DW)	M68CBL05A M68CBL05A M68CBL05A	M68TA05JB3P20 M68TA05JB3P28 M68TA05JB3P28	M68DIP28SOIC
68HC705JB4	M68MMPFB0508 or M68MMDS0508	X68EM05JB4	28-pin DIP (P) 28-pin SOIC (DW)	M68CBL05A M68CBL05A	M68TA05JB4P28 M68TA05JB4P28	M68DIP28SOIC
68HC705JJ7 68HC05JJ6	M68MMPFB0508 or M68MMDS0508	X68EM05JP7	20-pin DIP (P) 20-pin SOIC (DW)	M68CBL05A M68CBL05A	X68TA05JJ7P20 X68TA05JJ7P20	M68DIP20SOIC
68HC705JP7 68HC05JP6	M68MMPFB0508 or M68MMDS0508	X68EM05JP7	28-pin DIP (P) 28-pin SOIC (DW)	M68CBL05A M68CBL05A	X68TA05JP7P28 X68TA05JP7P28	M68DIP28SOIC
68HC05J1A 68HC705J1A	M68MMPFB0508 or M68MMDS0508	M68EM05J1A	20-pin DIP (P) 20-pin SOIC (DW)	M68CBL05A M68CBL05A	M68TA05J2P20 M68TA05J2P20	M68DIP20SOIC
68HC705KJ1	M68MMPFB0508 or M68MMDS0508	M68EM05J1A	16-pin DIP (P) 16-pin SOIC (DW)	M68CBL05A M68CBL05A	M68TA05KJ1P16 M68TA05KJ1P16	M68DIP16SOIC
68HC05L5/L16 68HC705L16	M68MMPFB0508 or M68MMDS0508	M68EML05L16	80-pin QFP (FU)	M68CBL05E	M68TE05L16FU80	M68TQS080SBG1 ⁽¹⁾ M68TQP080SBM01 ⁽¹⁾
68HC05L25 68HC705L26	M68MMPFB0508 or M68MMDS0508	M68EML05L26	52-pin LQFP (PB)	M68CBL05C	M68TC05L26PB52	
68HC05P1A/P4A/P9A 68HC705P6A	M68MMPFB0508 or M68MMDS0508	X68EML05P6A	28-pin DIP (P) 28-pin SOIC (DW)	M68CBL05A M68CBL05A	M68TA05P9P28 M68TA05P9P28	M68DIP28SOIC
68HC05P18 68HC805P18	M68MMPFB0508 or M68MMDS0508	X68EM05P18	28-pin DIP (P) 28-pin SOIC (DW)	M68CBL05A M68CBL05A	M68TA05P9P28 M68TA05P9P28	M68DIP28SOIC
68HC05PL4 68HC705PL4	M68MMPFB0508 or M68MMDS0508	X68EML05PL4	20-pin DIP (P) 28-pin DIP (P) 20-pin SOIC (DW) 28-pin SOIC (DW)	M68CBL05A M68CBL05A M68CBL05A M68CBL05A	M68TA05PL4P20 M68TA05PL4P28 M68TA05PL4P20 M68TA05PL4P28	M68DIP20SOIC M68DIP28SOIC
68HC805PV8	M68MMPFB0508 or M68MMDS0508	X68EM05PV8	28-pin SOIC (DW)	M68CBL05A	X68TA05PV8P28	M68DIP28SOIC

1. Each QFP target head adapter includes one TQSOCKET with guides (M68TQxxxSyG1) and one TQPACK disposable surface mount adapter (M68TQxxxSy1 – 1.2-mm lead length or M68TQxxxSyM01 – 1.6-mm lead length). Order additional TQPACKS and TQSOCKETs (optional) using part numbers referenced in the Surface Mount Adapters column to support multiple target systems.

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC05 Emulators, Cables, and Adapters (continued)

Product	Platform	Emulation Modules	Packages Supported	Flex Cable	Target Head Adapter	Surface Mount Adapter
68HC05RC18 68HC705RC16/RC17	M68MMPFB0508 or M68MMDS0508	X68EM05RC16	28-pin DIP (P) 28-pin SOIC (DW)	M68CBL05A M68CBL05A	X68TA05RC16P28 X68TA05RC16P28	M68DIP28SOIC
68HC05SR3/SU3A 68HC705SR3	M68MMPFB0508 or M68MMDS0508	M68EM05SR3	40-pin DIP (P) 44-pin QFP (FB) 42-pin SDIP (B)	M68CBL05B M68CBL05C M68CBL05B	M68TB05SR3P40 M68TC05SR3FB44 M68TB05SR3B42	M68TQS044SAG1 ⁽¹⁾ M68TQP044SAMO1 ⁽¹⁾
68HC05X4 68HC705X4	M68MMPFB0508 or M68MMDS0508	M68EM05X4	28-pin DIP (P) 28-pin SOIC (DW)	M68CBL05A M68CBL05A	M68TA05X4P28 M68TA05X4P28	M68DIP28SOIC
68HC05X16/X32 68HC705X32	M68MMPFB0508 or M68MMDS0508	M68EML05X32	64-pin QFP (FU)	M68CBL05E	M68TE05X32FU64	M68TQS064SAG1 ⁽¹⁾ M68TQP064SA1 ⁽¹⁾

1. Each QFP target head adapter includes one TQSOCKET with guides (M68TQSxxxSyG1) and one TQPACK disposable surface mount adapter (M68TQPxxxSy1 – 1.2-mm lead length or M68TQPxxxSyMO1 – 1.6-mm lead length). Order additional TQPACKs and TQSOCKETs (optional) using part numbers referenced in the Surface Mount Adapters column to support multiple target systems.

MICROCONTROLLERS

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC08 Emulators, Cables, and Adapters

Product	Platform	Emulation Modules	Packages Supported	Flex Cable	Target Head Adapter	Surface Mount Adapter
68HC908AB32 68HC08AB16A	M68MMPFB0508 or M68MMDS0508	M68EML08AB32	64-pin QFP (FU)	M68CBL05C	M68TC08AB32FU64	M68TQS064SAG1 ⁽²⁾ M68TQP064SA1 ⁽²⁾
68HC08AS20/32/60 68HC08AZ32/60 68HC908AS32/60A 68HC908AZ60A 68HC908AZ32A	M68MMPFB0508 or M68MMDS0508	M68EM08AS/AZ60A	52-pin PLCC (FN) 64-pin QFP (FU)	M68CBL05C M68CBL05C	X68TC08AX48FN52 X68TC08AX48FU64	M68TQS064SAG1 ⁽²⁾ M68TQP064SA1 ⁽²⁾
68HC908BD48	M68MMPFB0508 or M68MMDS0508	M68EM08BD48	42-pin SDIP (B) 44-pin QFP (FB) 28-pin DIP (P)	M68CBL05B M68CBL05C M68CBL05B	M68TB08BD48B42 M68TC08BD48FB44 M68TB08BD48P28	M68TQS044SAG1 ⁽²⁾ M68TQP044SAMO1 ⁽²⁾
68HC908EY16	M68MMPFB0508 or M68MMDS0508	M68EML08EY	32-pin QFP (FA)	M68CBL05C	M68TC08EYFA32	M68TQP032SA1
68HC908GP32 68HC08GP32 68HC908GT16 68HC908GT8	M68MMPFB0508 or M68MMDS0508	M68EML08GPGT	40-pin DIP (P) 42-pin SDIP (B) 44-pin QFP (FB)	M68CBL05B M68CBL05B M68CBL05C	M68TB08GP32P40 M68TB08GP32B42 M68TC08GP32FB44	M68TQS044SAG1 ⁽²⁾ M68TQP044SAMO1 ⁽²⁾
68HC908GR8 68HC908GR4	M68MMPFB0508 or M68MMDS0508	M68EML08GPGT	28-pin DIP (P) 32-pin QFP (FA)	M68CBL05C M68CBL05C	M68TC08GR8P28 M68TC08GR8FA32	M68TQS032SAG1 ⁽²⁾ M68TQP032SA1 ⁽²⁾
68HC908GR16 68HC908GZ16	M68MMPFB0508 or M68MMDS0508	M68EML08GZ16	32-pin QFP (FJ) 48-pin QFP (FA)	M68CBL05C M68CBL05C	M68TC08GZFJ32 M68TC08GZFA48	M68TQP032SA1 M68TQP048SD1
68HC908JB8	M68MMPFB0508 or M68MMDS0508	M68EM08JB8	20-pin DIP (P) 20-pin SOIC (DW) 28-pin SOIC (DW) 42-pin SDIP (B) 44-pin QFP (FB)	M68CBL05C M68CBL05C M68CBL05C M68CBL05B M68CBL05C	M68TC08JB8P20 M68TC08JB8P20 M68TC08JB8P28 M68TB08JB8B42 M68TC08JB8FB44	M68DIP20SOIC M68DIP28SOIC M68TQS044SAG1 ⁽²⁾ M68TQP044SAMO1 ⁽²⁾
68HC908JB16	M68MMPFB0508 or M68MMDS0508	M68EML08JB16	32-pin LQFP (FA) 28-pin SOIC (DW)	M68CBL05C	M68TC08JB16FA32 M68TC08JB16P28	M68DIP28SOIC
68HC908JG16	M68MMPFB0508 or M68MMDS0508	M68EML08JB16	32-pin LQFP (FA)	M68CBL05C	M68TC08JG16FA32	

1. New development tool product to be introduced.

2. Each QFP target head adapter includes one TQS SOCKET with guides (M68TQxxxSyG1) and one TQPACK disposable surface mount adapter (M68TQPxxxSyM1 – 1.2-mm lead length or M68TQPxxxSyMO1 – 1.6-mm lead length). Order additional TQPACKS and TQS SOCKETS (optional) using part numbers referenced in the Surface Mount Adapters column to support multiple target systems.

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC08 Emulators, Cables, and Adapters (continued)

Product	Platform	Emulation Modules	Packages Supported	Flex Cable	Target Head Adapter	Surface Mount Adapter
68HC908JK1 68HC908JK3 68HC908JK8	M68MMPFB0508 or M68MMDS0508	M68EML08LJK	20-pin DIP (P) 20-pin SOIC (DW)	M68CBL05C	M68TC08JK3P20 M68TC08JK3P20	M68DIP20SOIC
68HC908JL3 68HC08JL3 68HC908JL8	M68MMPFB0508 or M68MMDS0508	M68EML08LJK	28-pin DIP (P) 28-pin SOIC (DW) 32-pin QFP (FA)	M68CBL05C	M68TC08JL3P28 M68TC08JL3P28 M68TC08JL8FA32	M68DIP28SOIC
68HC908KX8 68HC908KX2	M68MMPFB0508 or M68MMDS0508	M68EML08KX	20-pin SOIC (DW) 16-pin SOIC (DW)	M68CBL05C	M68TA08KX6P16	M68DIP16SOIC
68HC908LD64	M68MMPFB0805 or M68MMDS0508	X68EML08LD64	64-pin QFP (FU)	M68CBL05C	M68TC08LD64FU64	M68TQS064SAG1 ⁽²⁾ M68TQP064SA1 ⁽²⁾
68HC908LJ12	M68MMPFB0805 or M68MMDS0508	M68EML08LJ12	64-pin QFP (FU) 64-pin LQFP (PB) 52-pin QFP (FB)	M68CBL05C	M68TC08LJ12FU64 M68TC08LJ12PB64 M68TC08LJ12FB52	M68TQS064SAG1 ⁽²⁾ M68TQP064SA1 ⁽²⁾
68HC908MR8 68HC08MR4	M68MMPFB0805 or M68MMDS0508	M68EM08MR8 ⁽¹⁾	32-pin QFP (FA)	M68CBL05C	MC68TC08MR8FA32	M68TQS032SAG1 ⁽²⁾ M68TQP032SA1 ⁽²⁾
68HC908MR32 68HC908MR24 68HC908MR16	M68MMPFB0508 or M68MMDS0508	M68EM08MR32	64-pin QFP (FU) 56-pin SDIP (B)	M68CBL05C M68CBL05C	M68TC08MR24FU64 M68TC08MR24B56	M68TQS064SAG1 ⁽²⁾ M68TQP064SAM01 ⁽²⁾
68HC908QT1 68HC908QT2 68HC908QT4 68HC908QY1 68HC908QY2 68HC908QY4	M68MMPFB0508 or M68MMDS0508	M68EML08QTQY	8-pin DIP (P) 8-pin SOIC (DW) 16-pin DIP (P) 16-pin SOIC (DW) 16-pin TSSOP (DT)	M68CBL05A	M68TA08QTP8 M68TA08QTP8 M68TA08QYP16 M68TA08QYP16 M68TA08QYT16	M68DIP8SOIC M68DIP16SOIC M68DIP16TSSOP
68HC908RK2	M68MMPFB0508 or M68MMDS0508	M68EML08RK2 ⁽¹⁾	20-pin DIP (P) 20-pin SOIC (DW) 32-pin QFP (FA)	M68CBL05A M68CBL05A M68CBL05A	M68TA05RK2P20 ⁽¹⁾ M68TA05RK2P20 ⁽¹⁾ M68TA05RK2FA32	M68DIP20SOIC M68TQS032SAG1 ⁽²⁾ M68TQP032SA1 ⁽²⁾
68HC908SR12	M68MMPFB0508 or M68MMDS0508	M68EML08SR12	42-pin SDIP (B) 48-pin QFP (FA)	M68CBL05B M68CBL05C	M68TB08SR12B42 M68TC08SR12FA48	M68TQS048SDG1 ⁽²⁾ M68TQP048SD1 ⁽²⁾

1. New development tool product to be introduced.

2. Each QFP target head adapter includes one TQSOCKET with guides (M68TQxxxxSyG1) and one TQPACK disposable surface mount adapter (M68TQPxxxSyM01 – 1.2-mm lead length or M68TQPxxxSyM01 – 1.6-mm lead length). Order additional TQPACKS and TQSOCKETs (optional) using part numbers referenced in the Surface Mount Adapters column to support multiple target systems.

MICROCONTROLLERS

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC11 Evaluation Board

Products	Board
68HC11A8 68HC11E9 68HC711E9 68HC811E2	M68HC11EVBU2

68HC11 Emulators, Cables, and Adapters

Product	Platform	Emulation Module (EM)	Package	Flex Cable	Target Head
68HC11D3	M68MMDS11 or M68HC11PFB	M68EM11D3	40-pin plastic DIP (P)	M68CBL05C	M68TC11D3P40
		M68EM11D3	44-pin PLCC (FN)	M68CBL05C	M68TC11D3FN44
		M68EM11D3	44-pin QFP (FB)	M68CBL05C	M68TC11D3FB44
68HC711D3	M68MMDS11 or M68HC11PFB	M68EM11D3	40-pin plastic DIP (P)	M68CBL05C	M68TC11D3P40
		M68EM11D3	44-pin PLCC (FN)	M68CBL05C	M68TC11D3FN44
68HC11E9 68HC711E9	M68MMDS11 or M68HC11PFB	M68EM11E20	52-pin PLCC (FN)	M68CBL05C	M68TC11E20FN52
		M68EM11E20	52-pin QFP (PB)	M68CBL05C	M68TC11E20PB52
		M68EM11E20	64-pin QFP (FU)	M68CBL05C	M68TC11E20FU64
68HC11E20 68HC711E20	M68MMDS11 or M68HC11PFB	M68EM11E20	52-pin PLCC (FN)	M68CBL05C	M68TC11E20FN52
		M68EM11E20	64-pin PLCC (FU)	M68CBL05C	M68TC11E20FU64
68HC811E2	M68MMDS11 or M68HC11PFB	M68EM11E20	48-pin plastic DIP (P)	M68CBL05B	M68TB11E20P48
		M68EM11E20	52-pin PLCC (FN)	M68CBL05B	M68TC11E20FN52
68HC11F1	M68MMDS11 or M68HC11PFB	M68EM11F1	68-pin PLCC (FN)	M68CBL05C	M68TC11F1FN68
		M68EM11F1	80-pin TQFP (PU)	M68CBL05C	M68TC11F1PU80
68HC11G5 68HC11G7	M68MMDS11 or M68HC11PFB	M68EM11G5	84-pin PLCC (FN)	M68CBL05D	M68TD11G5FN84
68HC11K4 68HC711K4	M68MMDS11 or M68HC11PFB	M68EM11K4	80-pin TQFP (FU)	M68CBL05E	M68TE11K4FU80
		M68EM11K4	84-pin PLCC (FN)	M68CBL05D	M68TD11K4FN84
68HC11KS2 68HC711KS2	M68MMDS11 or M68HC11PFB	M68EM11KA4	68-pin PLCC (FN)	M68CBL05C	M68TC11KA4FN68
68HC11L6 68HC711L6	M68MMDS11 or M68HC11PFB	M68EM11L6	64-pin QFP (FU)	M68CBL05C	M68TC11L6FU64
		M68EM11L6	68-pin PLCC (FN)	M68CBL05C	M68TC11L6FN68
68HC11P2 68HC711P2	M68MMDS11 or M68HC11PFB	M68EM11P2	84-pin PLCC (FN)	M68CBL05D	M68TD11K4FN84

MICROCONTROLLERS (continued)
HARDWARE TOOLS (continued)
68HC05 Programmers

Product	Packages Supported	Programming Adapter	Programmer Board
68HC705B16 68HC705B32	52-pin PLCC (FN) 56-pin SDIP (B)	n/a	M68ICS05B Serial Programmer/In-Circuit Simulator
68HC705BD3 68HC705BD7	40-pin DIP (P)	M68UPA05BD3040	M68HC705UPGMR
	42-pin SDIP (B)	M68UPA05BD3B42	
68HC705C8A 68HC705C9A	40-pin DIP (P/S) 44-pin PLCC (FN/FS)	n/a	M68ICS05C Serial Programmer/In-Circuit Simulator
68HC705E6	44-pin QFP (FB) 28-pin SOIC (DW)	n/a	M68HC705E6PGMR
68HC705F32	100-pin TQFP	n/a	X68HC705F32PGMR
68HC705H12	52-pin PLCC (FN)	n/a	X68HC705H12PGMR
68HC705K1 68HC705J1A	16-pin and 20-pin DIP (P) 16-pin and 20-pin SOIC (DW)	n/a	M68ICS05KJ Serial Programmer/In-Circuit Simulator
68HC705J5A	16-pin DIP (P)	M68UPA05J5AP16	M68HC705UPGMR
	20-pin DIP (P)	M68UPA05J5AP20	
	20-pin SOIC (DW)	M68UPA05J5ADW20	
68HC705JB3	20-pin DIP (P)	M68UPA05JB3P20	M68HC705UPGMR
	28-pin DIP (P)	M68UPA05JB3P28	
	28-pin SOIC (DW)	M68UPA05JB3DW28	
68HC705JB4	28-pin DIP (P)	M68UPA05JB4P28	M68HC705UPGMR
	28-pin SOIC (DW)	M68UPA05JB4DW28	
68HC705JJ7	20-pin DIP (P) 20-pin SOIC (DW)	n/a	M68ICS05JP Serial Programmer/In-Circuit Simulator
68HC705JP7	28-pin DIP (P) 28-pin SOIC (DW)	n/a	M68ICS05JP Serial Programmer/In-Circuit Simulator
68HC705L16	80-pin QFP (FU/FZ)	n/a	KITPGMR05L16
68HC705P6A	28-pin DIP (P) 28-pin SOIC (DW)	n/a	M68ICS05P Serial Programmer/In-Circuit Simulator
68HC805P18	28-pin DIP (P/S)	n/a	X68HC805P18PGMR
68HC705PL4	20-pin DIP (P)	M68UPA05PL4P20	M68HC705UPGMR or M68HC705UGANG
	28-pin DIP (P)	M68UPA05PL4P28	
	20-pin SOIC (DW)	M68UPA05PL4DW20	
	28-pin SOIC (DW)	M68UPA05PL4DW28	
68HC805PV8	28-pin SOIC (DW)	n/a	X68HC805PV8PGMR
68HC705SR3	40-pin DIP (P)	M68UPA05SR3P40	M68HC705UPGMR
	44-pin QFP (FB)	M68UPA05SR3FB44	
68HC705X4	28-pin DIP (P/S) 28-pin SOIC (DW)	n/a	M68HC705X4PGMR
68HC705X32	64-pin QFP (FU) 68-pin PLCC (FN)	n/a	M68HC705X32PGMR

MICROCONTROLLERS

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC08 Programmiers

Product	Packages Supported	Programming Adapter	Programmer Board
All 68HC908s	n/a (In-circuit only)	n/a	MON08 Cyclone — Stand-alone programmer for in-circuit programming and debug (part number M68CYCLONE08)
	n/a (In-circuit only)	n/a	MON08 Multilink Cable — For in-circuit programming and debug (part number M68MULTILINK08)
68HC908AB32	64-pin QFP	n/a	M68ICS08AB Serial Programmer/In-Circuit Simulator
68HC908AB32	64-pin QFP	M68UPA08AB32FU64	M68HC705UPGMR or M68HC705UGANG Parallel Programmer
68HC908AZ60A 68HC908AS60A	64-pin QFP (FU) 52-pin PLCC (FN)	n/a	M68ICS08AZAS Serial Programmer/In-Circuit Simulator
68HC908BD48	44-pin QFB (FB)	M68UPA08BD48FB44	M68HC705UPGMR or M68HC705UGANG Parallel Programmer
	42-pin SDIP (B)	M68UPA08BD48B42	
	28-pin DIP (P)	M68UPA08BD48P28	
68HC908GP32	40-pin DIP (P) 44-pin QFP (FB)	n/a	M68ICS08GPGT Serial Programmer/In-Circuit Simulator: recommended for DIP and QFP programming
	68HC908GP32	40-pin DIP (P) 42-pin SDIP (B) 44-pin QFP (FB)	M68UPA08GP32P40 M68UPA08GP32B42 M68UPA08GP32FB44
68HC908GR8 68HC908GR4	28-pin DIP (P) 32-pin QFP (FA)	n/a	M68ICS08GR Serial Programmer/In-Circuit Simulator
68HC908JB8	20-pin DIP (P) 20-pin SOIC (DW) 28-pin SOIC (DW) 42-pin SDIP (B) 44-pin QFP (FB)	n/a	M68ICS08JB Serial Programmer/In-Circuit Simulator
68HC908JB8	20-pin DIP (P)	M68UPA08JB8P20	M68HC705UPGMR or M68HC705UGANG Parallel Programmer
	20-pin SOIC (DW)	M68UPA08JB8DW20	
	28-pin SOIC (DW)	M68UPA08JB8DW28	
	42-pin SDIP (B)	M68UPA08JB8B42	
	44-pin QFP (FB)	M68UPA08JB8FB44	
68HC908JB16/JG16	28-pin SOIC (DW) 32-pin LQFP (FA)	n/a	M68ICS08JB16/JG16 Serial Programmer/In-Circuit Simulator
68HC908JB16	28-pin SOIC (DW) 32-pin LQFP (FA)	M68PA08JB16DW28 M68PA08JB16FA32	M68SPGMR08 Serial Programmer
68HC908JG16	32-pin LQFP (FA)	M68PA08JG16FA32	M68SPGMR08 Serial Programmer
68HC908JK3/JK1	20-pin DIP (P) 20-pin SOIC (DW)	n/a	M68ICS08JLJK Serial Programmer/In-Circuit Simulator
68HC908JK3/JK1	20-pin DIP (P)	M68UPA08JK3P20	M68HC705UPGMR or M68HC705UGANG Parallel Programmer
	20-pin SOIC (DW)	M68UPA08JK3DW20	
68HC908JL3	28-pin DIP (P) 28-pin SOIC (DW)	n/a	M68ICS08JLJK Serial Programmer/In-Circuit Simulator
68HC908JL3	28-pin DIP (P)	M68UPA08JL3P28	M68HC705UPGMR or M68HC705UGANG Parallel Programmer
	28-pin SOIC (DW)	M68UPA08JL3DW28	

MICROCONTROLLERS (continued)
HARDWARE TOOLS (continued)
68HC08 Programmiers (continued)

Product	Packages Supported	Programming Adapter	Programmer Board
68HC908KX8 68HC908KX2	16-pin DIP (P) 16-pin SOIC (DW)	n/a	M68ICS08KX
68HC908LD64	64-pin QFP (FU)	M68UPA08LD64FU64	M68HC705UPGMR or M68HC705UGANG Parallel Programmer
		M68PA08LD64FU64	M68SPGMR08 Serial Programmer with No In-Circuit Simulator
		n/a	M68PGMR08DDC FLASH Programming through DDC Interface
68HC908LJ12	64-pin QFP (FU) 52-pin QFP (FB) 64-pin LQFP (PB)	n/a	M68ICS08LJ Serial Programmer/In-Circuit Simulator
68HC908MR32 68HC908MR16 68HC908MR8	56-pin SDIP (B) 64-pin QFP (FU) 32-pin QFP (FA)	n/a	M68ICS08MR Serial Programmer/In-Circuit Simulator
68HC908RK2	20-pin SOIC (DW)	n/a	M68ICS08RK2 Serial Programmer/In-Circuit Simulator
68HC908SR12	42-pin SDIP (B) 48-pin QFP (FA)	n/a	M68ICS08SR Serial Programmer/In-Circuit Simulator
68HC908SR12	42-pin SDIP (B) 48-pin QFP (FA)	M68UPA08SR12B42	M68HC705UPGMR or M68HC705UGANG Parallel Programmer
		M68UPA08SR12FA48	

MICROCONTROLLERS

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC11 Programmers

Product	Platform	Package	Programmer Adapter
68HC711D3	M68SPGMR11	40-pin plastic DIP (P)	M68PA11D3P40
		44-pin QFP (FB)	M68PA11D3FB44
		44-lead PLCC (FN)	M68PA11D3FN44
68HC711E9 68HC11E9/E1	M68SPGMR11	52-lead PLCC (FN)	M68PA11E20FN52
		52-lead QFP (PB)	M68PA11E20PB52
		64-lead QFP (FU)	M68PA11E20FU64
68HC711E20 68HC11E20	M68SPGMR11	52-lead PLCC (FN)	M68PA11E20FN52
		64-lead PLCC (FN)	M68PA11E20FU64
68HC811E2	M68SPGMR11	48-pin plastic DIP (P)	M68PA11A8P48
		52-lead PLCC (FN)	M68PA11E20FN52
68HC11F1	M68SPGMR11	68-lead PLCC (FN)	M68PA11F1FN68
		80-lead TQFP (PU)	M68PA11F1PU80
68HC11G5 68HC11G7	M68SPGMR11	84-lead PLCC (FN)	M68PA11G5FN84
68HC711K4 68HC11K4/K1	M68SPGMR11	80-lead TQFP (FU)	M68PA11K4FU80
		84-lead PLCC (FN)	M68PA11K4FN84
68HC711KA2 68HC11KA2	M68SPGMR11	68-lead PLCC (FN)	M68PA11KA4FN68
68HC711KA4 68HC11KA4	M68SPGMR11	68-lead PLCC (FN)	M68PA11KA4FN68
68HC711KS2 68HC11KS2	M68SPGMR11	68-lead PLCC (FN)	M68PA11KA4FN68
68HC711L6 68HC11L6	M68SPGMR11	64-lead QFP (FU)	M68PA11L6FU64
		68-lead PLCC (FN)	M68PA11L6FN68
68HC711P2 68HC11P2	M68SPGMR11	84-lead PLCC (FN)	M68PA11K4FN84

MICROCONTROLLERS (continued)
DEVELOPMENT SYSTEMS (continued)
HCS12 DEVELOPMENT KIT

The HCS12 Development Kit is an economical tool for developing code and evaluating it on HCS12 “Dx”, “A”, and “B” Family MCUs. This easy to order kit combines the BDM Multilink and an evaluation board (EVB). The EVB simplifies user evaluation of prototype hardware and software by providing the essential MCU timing and I/O circuitry as well as a prototype area to allow custom interfacing. The BDM Multilink interfaces to the EVB through the 6-pin BDM connector for real-time in-circuit emulation and fast FLASH programming.

HCS12DP256 Evaluation Board

- MC9S12DP256 MCU provides superset evaluation of all HCS12 “Dx”, “A”, and “B” derivatives
- 256K Bytes FLASH
- Prototyping area
- Header connectors for access to the MCU’s I/O and bus lines
- RS232 Communications
- CAN Communication

BDM Multilink

- Universal development tool for all BDM 68HC12s and HCS12s
- Real-time in-circuit emulation and debug
- Fast in-circuit programming
- Auto-detects frequency
- Small unobtrusive size (approximately 3” x 2” x 3/4”)
- Supports 2 V to 5.5 V targets

CodeWarrior Integrated Development Environment

- Full debugger, assembler, linker, and programmer
- Evaluation C compiler

The order number for this product is M68KIT912DP256.

BDM STAND-ALONE PROGRAMMER

The BDM Programmer provides a fast, efficient, low-cost method of programming the on-chip FLASH and EEPROM memory of our 68HC12 and HCS12 Families utilizing the BDM interface. The programmer can be used stand-alone with a simple push button and LED interface.

- Fast in-circuit stand-alone programming
 - Simple push button and LED user interface
 - Performs erase, program, and verify cycle on 256K FLASH parts in as little as 10.5 seconds
- Host-based programming with scripting capability to execute a series of commands
 - Automated programming of test routines, test execution, erase, and final software programming
- Optionally provides FLASH programming voltage via the BDM connector

The order number for this product is X68BDMPGMR12.

MICROCONTROLLERS

MICROCONTROLLERS (continued)

HARDWARE TOOLS (continued)

68HC12 Family

Product	Part Number	Evaluation Board	Serial Debug Interface Cable (BDM Cable)	ROM Monitor	Software	User Manual	Programming	Additional Information
68HC812A4	M68HC12A4EVB	•		•	•	•		Evaluation board for HC812A4.
	M68SDIL12		•		•	•	•	Serial cable to connect to HC12 background debug mode (BDM) debug connector.
68HC912B32	M68EVB912B32	•		•	•	•		Evaluation board for HC912B32.
	M68SDIL12		•		•	•	•	Serial cable to connect to HC12 BDM debug connector.
68HC912BC32	M68KIT912D60A	•		•		•		Kit with HC912D60 evaluation board (EVB) and serial debug interface (SDI) cable.
	M6EVB912D60A		•		•	•	•	Evaluation board for HC912D60A.
98HC912D60A	M68KIT912DG128A	•	•		•	•	•	Serial cable to connect to HC12 BDM debug connector.
	M68EVB912DG128A	•				•		Kit with HC912DG128A.
	M68SDIL12		•		•	•	•	Serial cable to connect to HC12 BDM debug connector.
68HC912DG128A	M68KIT912DG128A	•	•		•	•	•	Kit with HC912DG128A EVB and SDI.
	M68EVB912DG128A	•				•		Evaluation board for HC912DG128A.
	M68SDIL12		•		•	•	•	Serial cable to connect to HC12 BDM debug connector.
All HC12 Family	X68BDMPGMR12					•	Serial programmer usable without host PC.	

HCS12 Family

Product	Part Number	Evaluation Board	BDM Multilink Cable	ROM Monitor	Software	User Manual	Programming	Additional Information
9S12DP256 9S12DT256 9S12DJ256 9S12DG256 9S12A256	M68EVB912DP256	•		•	•	•		Evaluation board for 9512DX256.
	M68KIT912DP256	•	•	•	•	•	•	Kit with 912DP256 evaluation board and serial debug interface cable (SDI).
	M68MULTILINK12		•		•	•	•	BDM Multilink cable to connect to HC12 BDM debug connector.
	CWDEVSYS12DP256	•	•	•	•	•		Includes full compiler and EVB in handsome suitcase.
	X68BDMPGMR12						•	Serial programmer usable without host PC.
9S12DT128 9S12DJ128 9S12DG128 9S12A128	M68EVB912DP128	•		•	•	•		Evaluation board for 9512DX128.
	M68KIT912DP128	•	•	•	•	•	•	Kit with 912DP128 evaluation board and serial debug interface cable (SDI).
	M68MULTILINK12		•		•	•	•	BDM multiine cable to connect to HC12 BDM debug connector.
	X68BDMPGMR12						•	Serial programmer usable without host PC.
9S12H128 9S12H256	M68MULTILINK12		•		•	•	•	Includes full compiler and EVB in handsome suitcase.
	X68BDMPGMR12						•	Serial programmer usable without host PC.

MICROCONTROLLERS (continued)
HARDWARE TOOLS (continued)
68HC16 and 68300 MEVB Families

Product	Platform	Package	Microcontroller Personality Board	BDM Cable (Note)	Software
68HC916X1	M68MPFB1632	120-pin PQFP (FH)	M68MPB916X1C	M68ICD16 or M68SDIL	Included M68SDBUG16AB
68HC16Y1	M68MPFB1632	160-pin PQFP (FT)	M68MPB16Y1B	M68ICD16 or M68SDIL	Included M68SDBUG16AB
68HC16Z1	M68MPFB1632	132-pin PQFP (FC)	M68MPB16Z1B	M68ICD16 or M68SDIL	Included M68SDBUG16AB
68331	M68MPFB1632	132-pin PQFP (FC)	M68MPB331B	M68ICD32 or M68SDIL	Included M68SDBUG32AB
68332A	M68MPFB1632	132-pin PQFP (FC)	M68MPB332AB	M68ICD32 or M68SDIL	Included M68SDBUG32AB
68332G	M68MPFB1632	132-pin PQFP (FC)	M68MPB332GB	M68ICD32 or M68SDIL	Included M68SDBUG32AB
68336	M68MPFB1632	160-pin PQFP (FT)	M68MPB336GB	M68ICD32 or M68SDIL	Included M68SDBUG32AB
68376	M68MPFB1632	160-pin PQFP (FT)	M68MPB376GB	M68ICD32 or M68SDIL	Included M68SDBUG32AB

Note:
 ICD = Parallel cable to connect to the HC16 or 6833X BDM debug connector
 SDI = Serial cable to connect to the HC16 or 6833X BDM connector

M68300 Business Card Computer

Product	Platform	BCC
68331	M68300PFB	M68BCC331
68332A	M68300PFB	M68BCC332A
68332G	M68300PFB	M68BCC332G

MCORE Family

Product Supported	Description	Part Number	Serial Cable	CD ROM	User Manuals	Power Supply	Silicon Samples
MMC2107	Low-cost evaluation board	MMCEVB2107	•	•	•	•	•
	Mid-range evaluation board	MMCCMB2107	•	•	•	•	•
	Mid-range evaluation board plus platform board	KITEVSMMC2107	•	•	•	•	•
	Serial debugger interface to 6833X BDM or MCORE OnCE debug connector	MMC14EBDI02	•		•	•	
MMC2114	Low-cost evaluation board	MMCEVB2114	•	•	•	•	•
	Serial debugger interface to 6833X BDM or MCORE OnCE debug connector	MMCCMB2114	•	•	•	•	•
		MMC14EBDI02	•		•	•	

MICROCONTROLLERS

MICROCONTROLLERS (continued) THIRD PARTY TOOLS (continued)

Microcontroller Third Party Development Tool Partners

Company Name	HC05	HC08	HC11	HC12	HC16	World Wide Web URL	Email Address
Adapters							
Adapters.com	•	•	•	•	•	www.adapters.com	sales@adapters.com
Logical Systems Corp.		•	•			www.logicals.com	info@logicals.com
Assemblers							
Avocet Systems, Inc.	•	•	•	•	•	www.avocetsystems.com	sales@avocetsystems.com
Engineers Collaborative, Inc., The (TECI)	•		•			www.tec-l.com	sales@tec-l.com
Green Hills Software						www.ghs.com	sales@ghs.com
Metrowerks	•	•	•	•	•	www.metrowerks.com	info@metrowerks.com
IAR Systems	•		•	•	•	www.iar.se	info@iar.se
P&E Microcomputer Systems, Inc.	•	•	•	•	•	www.pemicro.com	pemicro@pemicro.com
TASKING							
Virtual Micro Design	•	•	•			www.vmdesign.com	info@vmdesign.com
BDM Support Tools							
Archimedes Software, Inc.					•	www.archimedessoftware.com	customer-service@archimedesinc.com
Axiom Mfg.				•		www.axman.com	Gary@axman.com
Cosmic Software, Inc.				•	•	www.cosmic-software.com	info@cosmic-us.com
Wind River Systems						www.wrs.com	inquiries@windriver.com
Hitex Development Tools				•		www.hitex.com	info@hitex.com
Metrowerks				•	•	www.metrowerks.com	info@metrowerks.com
Agilent Technologies, Inc.						www.agilent.com	www.agilent.com
Nohau Corporation				•	•	www.nohau.com	sales@nohau.com
Avocet Systems, Inc.				•		www.avocetsystems.com	sales@avocetsystems.com
IAR Systems				•		www.iar.se	info@iar.se
iSYSTEM				•	•	www.isystem.com	emulators@isystem.com
Kevin W Ross				•		www.nwlink.com/~kevinro/products.html	kevinro@nwlink.com
Lauterbach, Inc.				•	•	www.lauterbach.com	info@lauterbach.com
Macraigor Systems LLC						www.macraigor.com	sales@macraigor.com
Microtek International, Inc.						www.microtek.com.tw/mice	mice@smtp.microtek.com.tw
Noral Micrologics, Inc.				•		www.noral.com/pages/bdmhc12.htm	www.noral.com/pages/moreinfo.htm
P&E Microcomputers, Inc.				•	•	www.pemicro.com	pemicro@pemicro.com
Sid Price's Software Tools				•		www.softtools.com/tools	sales@softtools.com
TASKING							
						www.tasking.com	sales@tasking-us.com

MICROCONTROLLERS (continued)

THIRD PARTY TOOLS (continued)

Microcontroller Third Party Development Tool Partners (continued)

Company Name	HC05	HC08	HC11	HC12	HC16	World Wide Web URL	Email Address
Code Coverage Tools							
Ashling Microsystems, Ltd.	•	•	•	•		www.ashling.com	www.ashling.com/motocontact.html
Cosmic Software, Inc.	•	•	•	•	•	www.cosmic-software.com	info@cosmic-us.com
Wind River Systems						www.wrs.com	inquiries@windriver.com
Green Hills Software						www.ghs.com	sales@ghs.com
Hitex Development Tools	•	•	•	•		www.hitex.com	info@hitex.com
Metrowerks	•	•	•	•	•	www.metrowerks.com	info@metrowerks.com
iSYSTEM	•	•	•		•	www.isystem.com	emulators@isystem.com
TASKING						www.tasking.com	sales@tasking-us.com
Compilers							
Archimedes Software, Inc.	•	•	•	•	•	www.archimedessoftware.com	customer-service@archimedesinc.com
Avocet Systems, Inc.			•		•	www.avocetsystems.com	sales@avocetsystems.com
Byte Craft Limited	•	•				www.bytecraft.com/c6805.html	info@bytecraft.com
ImageCraft Creations, Inc.		•	•	•	•	www.imagecraft.com/software	info@imagecraft.com
TASKING						www.tasking.com	sales@tasking-us.com
AppForge, Inc.						www.appforge.com	info@appforge.com
Cosmic Software, Inc.	•	•	•	•	•	www.cosmic-software.com	info@cosmic-us.com
Wind River Systems						www.wrs.com	inquiries@windriver.com
Green Hills Software						www.ghs.com	sales@ghs.com
Metrowerks	•	•	•	•	•	www.metrowerks.com	info@metrowerks.com
IAR Systems			•	•	•	www.iar.se	info@iar.se
Irvine Compiler Corporation						www.irvine.com/ppc.html	info@irvine.com
MCT Paul & Scherer GmbH						www.mct.net	sales@mct.de
Mekatronix, Inc.			•			www.mekatronix.com	customer@mekatronix.com
Debuggers							
Ashling Microsystems, Ltd.	•	•	•	•	•	www.ashling.com/advice	www.ashling.com/advice/motocontact.html
Avocet Systems, Inc.	•		•	•	•	www.avocetsystems.com	sales@avocetsystems.com
Cosmic Software, Inc.	•	•	•	•	•	www.cosmic-software.com	info@cosmic-us.com
Wind River Systems						www.wrs.com	inquiries@windriver.com
Green Hills Software						www.ghs.com	sales@ghs.com
Metrowerks	•	•	•	•	•	www.metrowerks.com	info@metrowerks.com

MICROCONTROLLERS

MICROCONTROLLERS (continued)

THIRD PARTY TOOLS (continued)

Microcontroller Third Party Development Tool Partners (continued)

Company Name	HC05	HC08	HC11	HC12	HC16	World Wide Web URL	Email Address
Debuggers (continued)							
IAR Systems			•	•	•	www.iar.se	info@iar.se
iSYSTEM	•	•	•	•	•	www.isystem.com	emulators@isystem.com
Lauterbach, Inc.	•	•	•	•	•	www.lauterbach.com	info@lauterbach.com
MCT Paul & Scherer GmbH						www.mct.net	sales@mct.de
Nohau Corporation				•		www.nohau.com	sales@nohau.com
Noral Micrologics, Inc.				•		www.noral.com/pages/bdmhc12.htm	www.noral.com/pages/moreinfo.htm
P&E Microcomputers, Inc.	•		•	•	•	www.pemicro.com	pemicro@pemicro.com
Sid Price's Software Tools	•		•	•		www.softtools.com/tools	sales@softtools.com
TASKING						www.tasking.com	sales@tasking-us.com
Virtual Micro Design	•	•	•			www.vmdesign.com	info@vmdesign.com
Evaluation Boards							
Avnet Design Services		•				www.ads.avnet.com/evalkits.html	ads@avnet.com
Axiom Mfg.		•	•	•		www.axman.com	Gary@axman.com
emWare		•				www.emware.com	sales@emware.com
Engineers Collaborative, Inc., The (TECI)	•		•			www.tec-l.com	sales@tec-l.com
ETAS, Inc.						www.etasinc.com	sales@etasinc.com
Kevin W Ross		•	•			www.nwlink.com/~kevinro/products.html	kevinro@nwlink.com
MCT Paul & Scherer GmbH		•				www.mct.net	sales@mct.de
Mekatronix, Inc.		•				www.mekatronix.com	customer@mekatronix.com
Microtek International, Inc.						www.microtek.com.tw/mice	mice@smtp.microtek.com.tw
Noral Micrologics				•		www.noral.com/pages/bdmcfire.htm	www.noral.com/pages/moreinfo.htm
Oztechnics P/L	•		•			www.oztechnics.com.au	info@oztechnics.com.au
P&E Microcomputers, Inc.					•	www.pemicro.com	pemicro@pemicro.com
SofTec Microsystems		•				www.softecmicro.com	info@softecmicro.com
Fuzzy and Neuro Tools							
Apronix, Inc.	•	•	•		•	www.aptronix.com/fide	sales@aptronix.com
Inform Software Corp.	•	•	•	•	•	www.fuzzytech.com	hotline@inform-ac.com
Code Generation Tools							
Aisys, Inc.	•	•				www.aisysinc.com	info@aisysinc.com
AppForge Software, LLC						www.appforge.com	info@appforge.com
ECS, Inc.						www.go-ecs.com	info-mcu@go-ecs.com
ETAS, Inc.				•		www.etasinc.com	sales@etasinc.com

MICROCONTROLLERS (continued)

THIRD PARTY TOOLS (continued)

Microcontroller Third Party Development Tool Partners (continued)

Company Name	HC05	HC08	HC11	HC12	HC16	World Wide Web URL	Email Address
In-Circuit Emulators (ICE)							
Ashling Microsystems, Ltd.	•	•	•	•	•	www.ashling.com/advice	www.ashling.com/advice/motocontact.html
Wind River Systems						www.wrs.com	inquiries@windriver.com
Engineers Collaborative Inc.,The (TECI)	•		•			www.tec-l.com	sales@tec-l.com
Hitex Development Tools	•	•	•	•		www.hitex.com	info@hitex.com
Avocet Systems, Inc.			•		•	www.avocetsystems.com	sales@avocetsystems.com
iSYSTEM	•	•	•	•		www.isystem.com	emulators@isystem.com
Lauterbach, Inc.	•	•	•	•	•	www.lauterbach.com	info@lauterbach.com
MetaLink Corporation	•		•			www.metaice.com	sales@metaice.com
Microtek International Inc.						www.microtek.com.tw/mice	mice@smtp.microtek.com.tw
Nohau Corporation			•		•	www.nohau.com	sales@nohau.com
Noral Micrologics, Inc.						www.noral.com/pages/bdmcfire.htm	www.noral.com/pages/moreinfo.htm
Logic Analyzers							
Corelis, Inc.						www.Corelis.com	sales@corelis.com
dli digital logic instruments			•	•	•	www.dli.de	sales@dli.de
Agilent Technologies, Inc.			•	•		www.agilent.com	www.agilent.com
iSYSTEM	•	•	•	•	•	www.isystem.com	emulators@isystem.com
Tektronix, Inc.			•	•	•	www.tek.com/Measurement/logic_analyzers	
Performance Analysis Tools							
Ashling Microsystems, Ltd.	•	•	•	•		www.ashling.com	www.ashling.com/motocontact.html
Avocet Systems, Inc.			•		•	www.avocetsystems.com	sales@avocetsystems.com
Wind River Systems						www.wrs.com	inquiries@windriver.com
Green Hills Software						www.ghs.com	sales@ghs.com
Hitex Development Tools	•	•	•	•		www.hitex.com	info@hitex.com
iSYSTEM	•	•	•		•	www.isystem.com	emulators@isystem.com
Virtual Micro Design	•	•	•			www.vmdesign.com	info@vmdesign.com
Programmers							
BP Microsystems, Inc.	•	•	•	•	•	www.bpmicro.com	info@bpmicro.com
Data I/O Corp.	•	•	•		•	www.dataio.com	webmaster@dataio.com
Engineers Collaborative, Inc.,The (TECI)	•		•			www.tec-l.com	sales@tec-l.com
Metrowerks	•	•	•	•	•	www.metrowerks.com	info@metrowerks.com
Mekatronix, Inc.			•			www.mekatronix.com	customer@mekatronix.com

MICROCONTROLLERS

MICROCONTROLLERS (continued)

THIRD PARTY TOOLS (continued)

Microcontroller Third Party Development Tool Partners (continued)

Company Name	HC05	HC08	HC11	HC12	HC16	World Wide Web URL	Email Address
Programmers (continued)							
Noral Micrologics, Inc.				•		www.noral.com/pages/bdmhc12.htm	www.noral.com/pages/moreinfo.htm
P&E Microcomputer Systems, Inc.				•	•	www.pemicro.com	pemicro@pemicro.com
Phyton, Inc.	•			•		www.phyton.com	info@phyton.com
SMS GmbH	•	•	•	•		www.sms-sprint.com	info@sms-sprint.com
Real-Time Operating Systems (RTOS)							
Accelerated Technology Inc.			•		•	www.atinucleus.com	info@atinucleus.com
AppForge, Inc.						www.appforge.com	info@appforge.com
Avocet Systems, Inc.	•	•	•	•	•	www.avocetsystems.com	sales@avocetsystems.com
CMX Systems, Inc.	•	•	•	•	•	www.cmx.com	cmx@cmx.com
OSE Systems, Inc.			•			www.enea.com	info@enea.com
ETAS Inc.				•		www.etasinc.com	sales@etasinc.com
Green Hills Software						www.ghs.com	sales@ghs.com
Metrowerks					•	www.metrowerks.com	info@metrowerks.com
KADAK Products, Ltd.						www.kadak.com	amxsales@kadak.com
Precise Software Technologies, Inc.						www.psti.com	info@psti.com
TASKING						www.tasking.com	sales@tasking-us.com
U S Software			•		•	www.ussw.com	sales@ussw.com
Simulation Tools							
Cosmic Software, Inc.	•	•	•	•	•	www.cosmic-software.com	info@cosmic-us.com
Wind River Systems						www.wrs.com	inquiries@windriver.com
Green Hills Software						www.ghs.com	sales@ghs.com
Metrowerks	•	•	•	•	•	www.metrowerks.com	info@metrowerks.com
Oztechnics P/L	•		•			www.oztechnics.com.au	info@oztechnics.com.au
P&E Microcomputer Systems, Inc.	•	•	•	•	•	www.pemicro.com	pemicro@pemicro.com
TASKING						www.tasking.com	sales@tasking-us.com
Virtual Micro Design	•	•	•			www.vmdesign.com	info@vmdesign.com

MICROCONTROLLERS (continued)

THIRD PARTY TOOLS (continued)

32-Bit Third Party Tools 68xxx, 683xx, MPC500, MCore, and ColdFire

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Assemblers						
Avocet Systems, Inc.		•				www.avocetsystems.com
Green Hills Software	•	•	•	•	•	www.ghs.com
P&E Microcomputer Systems, Inc.		•			•	www.pemicro.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
BDM Support Tools						
Cosmic Software		•				www.cosmic-software.com
Wind River Systems		•	•	•	•	www.wrs.com
Hitex Development Tools		•				www.hitex.com
Agilent Technologies, Inc.		•	•	•		www.agilent.com
iSystem		•		•		www.isystem.com
Lauterbach		•		•	•	www.lauterbach.com
Macraigor Systems LLC		•	•			www.macraigor.com
P&E Microcomputers, Inc.		•			•	www.pemicro.com
TASKING		•				www.tasking.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Code Coverage Tools						
Ashling Microsystems			•			www.ashling.com
Cosmic Software		•				www.cosmic-software.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
Hitex Development Tools		•				www.hitex.com
iSystem		•	•			www.isystem.com
TASKING		•		•		www.tasking.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Compilers						
Accelerated Technology Inc.		•	•		•	www.acceleratedtechnology.com
Byte Craft Limited				•		www.bytecraft.com
TASKING.		•		•		www.tasking.com
Cosmic Software		•				www.cosmic-software.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
P&E Microcomputers, Inc.		•			•	www.pemicro.com
GNU	•				•	www.gnu.com
Metrowerks		•	•	•	•	www.metrowerks.com

MICROCONTROLLERS

MICROCONTROLLERS (continued)

THIRD PARTY TOOLS (continued)

32-Bit Third Party Tools 68xxx, 683xx, MPC500, MCore, and ColdFire (continued)

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Debuggers						
Ashling Microsystems		•	•			www.ashling.com
Accelerated Technology Inc.		•	•	•	•	www.acceleratedtechnology.com
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
iSystem		•	•	•		www.isystem.com
Lauterbach	•	•	•	•	•	www.lauterbach.com
P&E Microcomputers, Inc.		•			•	www.pemicro.com
Metrowerks		•	•	•	•	www.metrowerks.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Evaluation Boards						
Axiom Manufacturing			•	•		www.axman.com
Arrow		•	•	•	•	www.arrow.com
Avnet		•	•	•	•	www.avnet.com
Future		•	•	•	•	www.future.com
Matrix Design Inc.					•	www.cadreiii.com
Metrowerks		•	•	•	•	www.metrowerks.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Logic Analyzers						
Agilent Technologies, Inc.		•	•	•		www.agilent.com
iSystem		•				www.isystem.com
Tektronix		•	•	•		www.tek.com/measurement/logic_analyzers
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
In-Circuit Emulators or Hardware Debug Interface						
Ashling Microsystems		•	•			www.ashling.com
Wind River Systems		•	•		•	www.wrs.com
Hitex Development Tools		•				www.hitex.com
iSystem		•	•			www.isystem.com
Lauterbach		•	•			www.lauterbach.com
Microtek International Inc.		•			•	www.microtek.com.tw/mice

MICROCONTROLLERS (continued)

THIRD PARTY TOOLS (continued)

32-Bit Third Party Tools 68xxx, 683xx, MPC500, MCore, and ColdFire (continued)

Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address
Performance Analysis Tools						
Wind River Systems	•	•	•	•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
iSystem		•	•			www.isystem.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address

Real-Time Operating Systems						
Accelerated Technology Inc.	•	•	•	•	•	www.atinucleus.com
Lineo		•	•	•	•	www.rtxc.com
ETAS		•	•			www.etasinc.com
Green Hills Software	•	•	•	•	•	www.ghs.com
Precise Software	•	•	•	•	•	www.psti.com
Snap Gear					•	www.snapgear.com
TASKING		•				www.tasking.com
U S Software		•	•		•	www.ussw.com
Wind River Systems	•				•	www.wrs.com
Company	68xxx	68300	MPC500	MCore	ColdFire	Web Address

Simulation Tools						
Wind River Systems	•	•		•	•	www.wrs.com
Green Hills Software	•	•	•	•	•	www.ghs.com
TASKING		•		•		www.tasking.com

NETWORK AND COMMUNICATIONS PROCESSORS

NETWORK AND COMMUNICATIONS PROCESSORS SOFTWARE TOOLS

PowerPC ISA — Metrowerks

Product	Description	Target Support	RTOS Support	Board Support	Host-Target Interface	Host Platforms	Language Support	Compiler Output Formats
CWEPPC	CodeWarrior for PowerPC ISA	MGT5100 MPC505, MPC509, MPC555, MPC56x MPC821, MPC823, MPC850, MPC86x, MPC8240, MPC826x, PPC603, PPC603ei, MPC7400	QNX Neutrino; RTX from Lineo; Embedix SDK from Lineo, Precise MQX, ATI Nucleus		MetroTRK, CodeTAP, PowerTAP, WireTAP Run Control Interface (JTAG and BDM (8xx only), Macraigor Systems COP Raven (for MPC82xx and PPC6xx), Macraigor Systems BDM Raven (for MPC8xx, MPC5xx), Abatron BDI 2000 (5xx, 8xx)	Windows 98/2000/NT/XP	C/C++, EC++, and PowerPC ISA, Assembly	ELF/DWARF 1.0; Motorola S-Record

HARDWARE TOOLS

Metrowerks

Product	Description	Target Board	Power Supply	Schematic	User Manual	Documentation	Interface Board
MPC823FADS	MPC823 FADS Board	•	•	•	•	•	
MPC850SRFADS	MPC850 FADS Board	•	•	•	•	•	
MPC8260ADS-PQ2	MPC8260 ADS Board	•	•	•	•	•	
MPC860FADS	MPC860 FADS Board	•	•	•	•	•	
MPC860TFADS	MPC860 TFADS Board	•	•	•	•	•	

NETWORK AND COMMUNICATIONS PROCESSORS (continued)
SOFTWARE AND DEVELOPMENT TOOLS
C-PORT NETWORK PROCESSOR FAMILY DEVELOPMENT ENVIRONMENT
C-Ware Software Toolset (CST)

Part Number	Description	Additional Information
CSCC500	C-Ware Software Toolset annual support contract. Provides email and phone support, as well as online updates of the CST for a period of one year from date of purchase.	Note: The CST can be downloaded from the C-Port Family support site at motorola.cportcorp.com/support .
CSTC501W	C-Ware Software Toolset, web site download of <i>current</i> CST release (Windows or UNIX)	
CSTC501C	C-Ware Software Toolset, CD-ROM of <i>current</i> CST release for Microsoft Windows	
CSTC501D	C-Ware Software Toolset, CD-ROM of <i>current</i> CST release for Sun Solaris UNIX	
CSTC501X ^(Note)	C-Ware Software Toolset for C-Port Network Processor family, custom order (purchase order description should specify CST release number, web download or CD-ROM, and intended operating system. (For example, Microsoft Windows or Sun Solaris UNIX.)	

Note: Use this order number only if you want an archived CST release.

C-Ware Development System (CDS)

Part Number	Description	Status
Base System		
CDEV101A	CDS Base Unit (Chassis, Power Supply, Single Board Computer)	Available
CDEV501A	CDS Power Supply (additional or spare)	Available
Network Processing Modules		
CDEV201200A	C-5 Switch Module (C-5 NP v. D0 silicon, 200 MHz max operating frequency)	Discontinued
CDEV221200A	C-5 Switch Module (C-5 NP v. D0 silicon, external classifier support, 200 MHz max operating frequency)	Available
Physical Interface Modules (PIMs)		
CDEV301A	10/100Ethernet PIM (16 10BASE-T/100BASE-T Ethernet ports)	Available
CDEV302A	Gigabit Ethernet PIM (2 ports of Gigabit Ethernet with 1000BASE-SX GBICs)	Available
CDEV304A	OC-12 PIM (4 OC-12 ports with SC optical connectors)	Available
CDEV305A	Combo 1 – Ethernet x OC-3 PIM (4 ports 10BASE-T/100BASE-T, 1 port Gigabit Ethernet with 1000BASE-SX GBIC, 4 ports OC-3 with MT-RJ connectors)	Available
CDEV306A	Combo 2 – Ethernet x OC-3 x OC-12 PIM (1 port Gigabit Ethernet with 1000BASE-SX GBIC, 4 ports OC-3 with MT-RJ connectors, 1 port OC-12 with SC optical connector)	Available

Note: Hardware Reference Designs for Switch Modules and PIMs are available on the C-Port Family support site at motorola.cportcorp.com/support.

NETWORK AND COMMUNICATIONS PROCESSORS

NETWORK AND COMMUNICATIONS PROCESSORS (continued)

SOFTWARE AND DEVELOPMENT SYSTEMS (continued)

MPC8xx and MPC82xx — Metrowerks

Product	Description	RTOS Support	Flex Cable	Serial Cable	Integrated Development Environment	CD ROM	User Manuals	Power Supply	Host Platforms	In-Circuit Simulator/ Programmer (Board)
CWDEVSYS823FADS	MPC823 Development System	QNX Neutrino; RTXC from Lineo; Embedix SDK from Lineo, Precise MQX, ATI Nucleus		•	4.2.1	•	•	•	Windows 95/98/2000/NT	
CWDEVSYS850FADS	MPC850 Development System	QNX Neutrino; RTXC from Lineo; Embedix SDK from Lineo, Precise MQX, ATI Nucleus		•	4.2.1	•	•	•	Windows 95/98/2000/NT	
CWDEVSYS860FADS	MPC860 Development System	QNX Neutrino; RTXC from Lineo; Embedix SDK from Lineo, Precise MQX, ATI Nucleus		•	4.2.1	•	•	•	Windows 95/98/2000/NT	
CWDEVSYS860TFADS	MPC860T Development System	QNX Neutrino; RTXC from Lineo; Embedix SDK from Lineo, Precise MQX, ATI Nucleus		•	4.2.1	•	•	•	Windows 95/98/2000/NT	
CWDEVSYS8260AMC	MPC8260 Development System	QNX Neutrino; RTXC from Lineo; Embedix SDK from Lineo, Precise MQX, ATI Nucleus		•	4.2.1	•	•	•	Windows 95/98/2000/NT	

CABLES AND HOST-TARGET INTERFACES

Metrowerks

Product	Description	Target Support	Connection Device	Power Supply
CWWIRETAPBDM	AMC's WireTAP Run Control Interface (BDM)	•	•	•
CWWIRETAPJTAG	AMC's WireTAP Run Control Interface (MPC6xx, 7xx, 82xx, 74xx)	•	•	•
CWPOWERTAPJTAG	PowerTAP Pro for JTAG, Hardware Only	•	•	•
CWPTAPPROJCWW	PowerTAP Pro for JTAG with CodeWarrior for Windows	•	•	•
CWPTAPPROJMW	PowerTAP Pro for JTAG with MWX-ICE Windows	•	•	•
CWPTAPPROJMS	PowerTAP Pro for JTAG with MWX-ICE Solaris	•	•	•
CWPOWERTAPDPI	PowerTAP Pro for DPI, Hardware Only	•	•	•
CWPTAPPRODCWW	PowerTAP Pro for DPI, with CodeWarrior for Windows	•	•	•
CWPTAPPRODMW	PowerTAP Pro for DPI with MWX-ICE Windows	•	•	•
CWPTAPPRODMS	PowerTAP Pro for DPI with MWX-ICE Solaris	•	•	•

NETWORK AND COMMUNICATIONS PROCESSORS (continued)

SOFTWARE AND DEVELOPMENT SYSTEMS (continued)

THIRD PARTY TOOLS

Third Party Vendor	Website	Families Supported	Embedded Operating Systems	Compilers and Code Generation Tools	Software Debuggers	Coverification Tools and Simulation Models	Emulators and Diagnostic Tools	Logic Analyzers	Boards and Systems	Support Chips	Drivers / Protocol Stacks
Abatron	www.abatron.ch	MPC8xx, MPC82xx, G2, G3, G4					•				
Accelerated Technology	www.acceleratedtechnology.com	MPC8xx, MPC82xx, G2, G3	•		•						
Agilent Technologies	www.agilent.com	MPC8xx, MPC82xx, G2, G3, G4					•	•			
Aisys	www.aisysinc.com	MPC8xx, MPC82xx, G2		•							•
Apogee Software	www.apogee.com	G2, G3, G4		•							
Artis Microsystems	www.artismicro.com	G2, G4							•		
CMX Systems	www.cmx.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
Cogent Computer Systems	www.cogcomp.com	MPC82xx, G2, G3							•		
Corelis	www.corelis.com	G2, G3, G4			•		•				
Data Connection	www.dataconnection.com	MPC8xx, MPC82xx									•
DY 4 Systems	www.dy4.com	G2, G3, G4							•		
Embedded Planet	www.embeddedplanet.com	MPC8xx, MPC82xx							•		
EmuTec	www.emutec.com	MPC8xx, MPC82xx, G2					•				
Express Logic	www.expresslogic.com	MPC8xx, MPC82xx, G2, G3	•								
Force Computers	www.forcecomputers.com	MPC8xx, MPC82xx, G3, G4							•		
GDA Technologies	www.gdatech.com	MPC8xx, MPC82xx, G4							•		
Green Hills Software	www.ghs.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•		•				
Hughes Network Systems	www.hns.com	MPC8xx									•
International Test Technologies	www.intertesttech.com	G2, G3					•				
Jungo	www.jungo.com	MC8xx									•
Kadak	www.kadak.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
Lauterbach	www.lauterbach.com	MPC8xx, MPC82xx, G2, G3			•		•				
LinuxWorks	www.linuxworks.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
MAI Logic	www.mai.com	G2, G3, G4							•	•	
Macraigor Systems	www.macraigor.com	MPC8xx, MPC82xx, G2, G3, G4			•		•				
Marvell Technology	www.marvell.com	G2, G3, G4							•	•	
Mentor Graphics	www.mentor.com	MPC8xx, MPC82xx, G2, G3	•	•	•	•					
MetaWare	www.metaware.com	MPC8xx, MPC82xx, G2, G3, G4		•	•						
Metrowerks	www.metrowerks.com	MPC8xx, MPC82xx, G2, G3, G4		•	•				•		

NETWORK AND COMMUNICATIONS PROCESSORS

THIRD PARTY TOOLS (CONTINUED)

Third Party Vendor	Website	Families Supported	Embedded Operating Systems	Compilers and Code Generation Tools	Software Debuggers	Coverification Tools and Simulation Models	Emulators and Diagnostic Tools	Logic Analyzers	Boards and Systems	Support Chips	Drivers / Protocol Stacks
MicroAPL	www.microapl.co.uk	G2, G3, G4		•							
Micro Digital	www.smxinfo.com	MPC8xx, MPC82xx, G2, G3	•		•						
MicroWare	www.microware.com	MPC8xx, MPC82xx, G2, G3	•	•	•						
MontaVista Software	www.mvista.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
Motorola Computer Group	mcg.motorola.com	G2, G3, G4							•		
Motorola SPS	www.motorola.com/powerpc	MPC8xx, MPC82xx, G2, G3, G4				•			•	•	
MPI Software	www.mpi-softtech.com	G3, G4		•							
Netplane	www.netplane.com	MPC8xx									•
OnCore Systems	www.oncoresystems.com	MPC82xx, G2, G3	•		•						
OSE Systems	www.ose.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
Pacific-Sierra Research	www.psrv.com	G4		•							
PLX Technology	www.plxtech.com	MPC8xx, G2, G3, G4							•	•	
Precise Software Technologies	www.psti.com	MPC8xx, MPC82xx, G2, G3, G4	•		•						
PrimeLayer	www.primelayer.com	MPC8xx, MPC82xx									•
QNX Software Systems	www.qnx.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
Radstone Technology	www.radstone.com	G2, G3, G4							•		
Red Hat	www.redhat.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
Simpod	www.simpod.com	MPC8xx, MPC82xx, G2, G3, G4				•					
Sophia Systems	www.sophia.com	MPC8xx, MPC82xx, G2, G3			•		•				
Summit Design	www.summit-design.com	MPC8xx, MPC82xx, G2, G3, G4				•					
Sun	www.sun.com/chorusos	MPC8xx, MPC82xx, G2, G3, G4	•	•	•						
Synopsys	www.synopsys.com	MPC8xx, MPC82xx, G2, G3, G4				•					
TASKING	www.tasking.com	MPC8xx, MPC82xx, G2, G3		•	•						
Tektronix	www.tektronix.com	MPC8xx, MPC82xx, G2, G3, G4						•			
Tundra Semiconductor	www.tundra.com	MPC8xx, MPC82xx, G2, G3, G4							•	•	
US Software	www.ussw.com	MPC8xx, MPC82xx	•								•
Wasabi Systems	www.wasabisystems.com	G2, G3, G4	•	•	•						
Wind River Systems	www.windriver.com	MPC8xx, MPC82xx, G2, G3, G4	•	•	•		•		•		•

NETWORK AND COMMUNICATIONS PROCESSORS
SOFTWARE TOOLS
Network Processor Alliances

Alliance	Description	Additional Information
SOFTWARE		
Wind River Systems	Tornado for Managed Switches (TMS) 2.0 integration with the C-Port Family development environment. C-5 Switch Support Package (C-5 SSP) available from Wind River Systems.	www.windriver.com/products/html/manswitch.html
COPROCESSORS		
Corrent™	2Gbps+IPSec 7120 (Hurricane) security coprocessor interfacing with the C-Port C-5e NP, enabling fast path security solutions such as VPN.	www.corrent.com
Cypress®	Network Database Search Engines (CYNSE70032) and Cypress coprocessor (CYNCP80192) connecting via SRAM ZBT to the C-Port C-5 NP, delivering higher levels of search performance and throughput for mission critical applications.	www.cypress.com/products
PMC-Sierra™	PM2329 ClassiP™ high performance, Layer 2–7, content processor interfacing with the C-Port C-5 NP, providing OC-48 rate classification. Software Development Kit available from PMC-Sierra.	www.pmcsierra.com/products/details/pm2329
Solidum	PAX.port™ 2500 classification processor interfacing with the C-Port C-5e NP, enabling multi-Gigabit processing (up to 2.5 Gbps).	www.solidum.com
FABRICS		
IBM™	PowerPRS (Packet Routing Switch) Fabric connecting through a UDASL interface to the C-Port C-5 NP, plus new versions of IBM PowerPRS connecting through CSIX L1 to the C-Port C-5e NP.	www-3.ibm.com/chips/products/wired/products/prsmo.html
DESIGN SERVICES AND SOLUTIONS		
HCL	Expert design services for the C-Port Network Processor Family, including hardware design and embedded, networking and telecom software development.	www.hcltechnologies.com
Motorola® Computer Group	System solutions based on the C-Port Network Processor Family, including networking line cards using C-Port C-5 NPs inside the Packet Transport Platform.	mcg.motorola.com
Motorola India Electronics (MIEL)	Extensive experience in developing application software for the C-Port Network Processor Family and has developed key reference applications for the C-Ware Software Toolset (CST), such as aal2Switch, volpToVoAtmSwitch, switch Router, and ATM Traffic Management.	1-512-996-4693

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