ANALOG PRODUCTS

MC33399 FACT SHEET

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COMMUNICATION
LIN, ISO-9141, J-1850

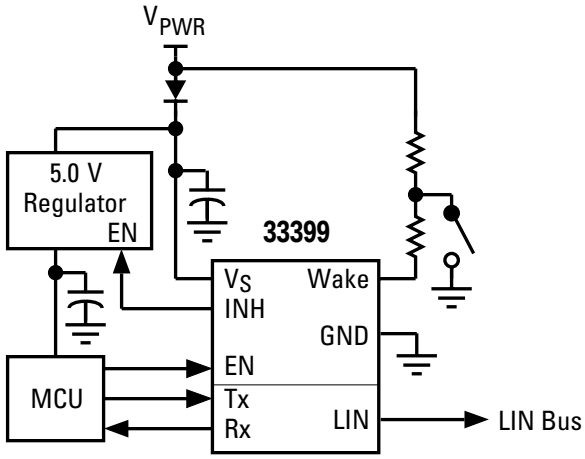
MC33399 LOCAL INTERCONNECT NETWORK - LIN - PHYSICAL LAYER

The MC33399 is a Physical Layer component. The device is compliant to LIN specification and provides digital communications over a low to medium speed network with multiple nodes. Waveshaping reduces EMI problems. The MC33399 has a low current sleep mode and a dedicated Wake-Up input.

APPLICATIONS

- Automotive Systems
- Robotic Systems
- Farm Equipment
- Industrial Controls
- Marine and Aircraft Networks

Simplified Application Diagram



CUSTOMER BENEFITS

- Lower system cost
- Industry standard communications protocol
- Smaller system (reduced components count)
- Faster design cycle time

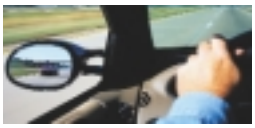
PERFORMANCE	TYPICAL VALUES
Bus Output	LIN
Data Rate	1.0 kB/s to 20 kB/s
Operating Voltage	9.0 – 16 V
Sleep/Stdby Current	20 µA
ESD	4000 V
Operating Temp	$-40°C \le T_A \le 125°C$

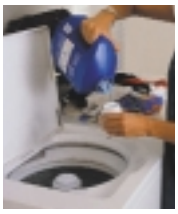
FEATURES

- Single battery supply (no 5.0 V_{DD} required)
- Very low standby current during Sleep mode 20 µA
- Dedicated wake-up input
- Control of external voltage regulator through INH pin
- 4.0 kV ESD on LIN bus pin
- High EMC immunity
- Speed communication up to 20 kBits/s

Protection	Detect	Shut Down	Limiting
Under Voltage	•	•	
Over Temperature	•	•	
Reverse Battery	•	•	•
Over Current	•		•
Unpowered Node	•	•	

Ordering Information	Package	Ship Method	Motorola Part Number
	8 SOICN	Rail	MC33399D
		T/R	MC33399DR2
Data Sheet Order Number			MC33399/D





QUESTIONS

- What type of module communication protocol are you using?
- Do you need a communication interface compliant to LIN specification?
- What is the maximum communication speed?
- What is the maximum supply current?
- Do you need wake up function?

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MC33399FS/D
Rev. 1