S12 MagniV S12VR

Integrated Relay Driver MCU

Features

Relay Driver

Integrated LIN Phy

Powered by 12 V Battery



Ultra Reliable Industrial

Product One-Sheet

Get Sample

Data Sheet

Tools

System in a Package – Highly integrated part ideal for space constrained relay driven DC motors on LIN Bus

Low System Cost – Direct connection with battery, integrated LIN phy, LS & HS drivers, HVI's for 12 V switch interfaces, EVDD for sensor supply reduce system, qualification and manufacturing cost.

High Reliability - High immunity to EMI and ESD stresses, LIN 2.x compliant with +/- 8 kV ESD capability.

Enablement – Supported by comprehensive hardware and software solution, which reduces development costs and time to market.

S12VR Specifications

Flash	16-64 KB	LS Driver	2
RAM	2 KB	HS Driver	Up to 2
EEPROM	128–512 B	12V VREG	70 mA at 12 V
Core	S12	EVDD	1ch 5 V/20 mA (source)
Speed	25 Mhz	SCI/SPI	2/1
ADC	10 bit 10 channel	Packages	32 LQFP, 48 LQFP
HVI	4	Timer/PWM	4 ch 16 bit/4 ch 16 bit
LIN Phy	1	Op Range	5.5 V–18 V

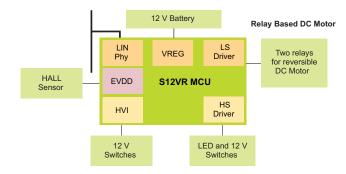
Part Numbers

Part Number	Temp Range	Package
S9S12VR64AF0MLC	-40 °C to 125 °C	32 LQFP
S9S12VR64AF0MLF	-40 °C to 125 °C	48 LQFP

Product Block Diagram



Application Example Block Diagram



Product Longevity

Success Stories

- Anti Pinch Window-Lift and Sunroof Worldwide
- ▶ Power Lift Gate in Americas
- ▶ Seat Heating in China
- ▶ Small LIN node in Asia

Target Applications

- Anti-Pinch Window Lift
- Sunroof
- Automatic Doors
- Power Lift Gate
- Seat Adjustment
- Seat Heating
- ▶ Small LIN Node

Enablement Tools

- Evaluation Boards / Hardware -S12VR64EVB
- ▶ Reference Solutions -Anti-Pinch Window Lift Reference Design
- ▶ Compiler / Debugger
 - -CodeWarrior
 - -Cosmic
- ▶ LIN Stack



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