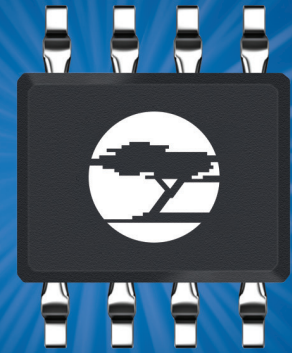


CYPRESS S6BT112A

AUTOMOTIVE-GRADE CXPI (CLOCK EXTENSION PERIPHERAL INTERFACE) TRANSCEIVER



PRODUCT OVERVIEW

INTRODUCTION

Cypress S6BT112A is for in-vehicle communications. S6BT112A supports CXPI (Clock eXtension Peripheral Interface) and works as an interface between a CXPI datalink controller and a bus line. S6BT112A can be used to enable inter ECU communication with speed going up to 20 kbps. This product also has a sleep/wake up control function for low power dissipation, making it reliable and energy-efficient.

APPLICATIONS

BODY CONTROL

- Doors
- Sunroof
- Power seats
- Power mirrors
- Power windows
- HVAC
- Body controllers
- Keyless entry
- Immobilizer

CAR INFOTAINMENT SYSTEM

- Car audio panel control
- Information display
- Switch control

SENSOR CONTROL

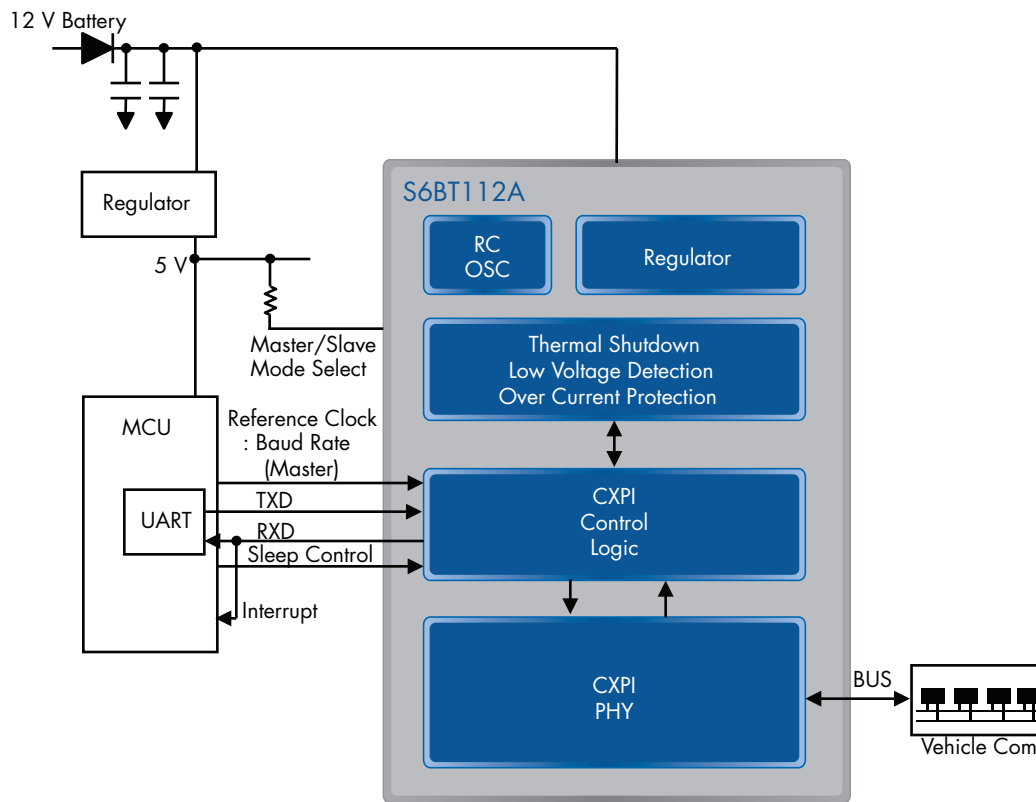
- Rain sensor
- TPMS
- Steering column angle sensor
- Passenger detection
- NOx sensor

LIGHTING

- Headlights
- Brake lights
- Tail lights
- Fog lamps (front/rear)

FEATURES

- JASO D015-3-15 compliant
- SAE J3076_201510 compliant
- CSMA/CD system implements faster response compared to a regular LIN protocol
- Bus speed range of 2.4 kbps to 20kbps
- Works with the secondary clock master function option
- Waveform shaping and SSCG option for low noise emission
- Single power supply: 5.3 V to 18 V, supports the load dump (ISO7637 pulse5b)
- Jumpstart: 27 V, 2 minutes
- Bus short circuit protection: maximum 200mA
- Loss of ground protection for bus leakage current: ± 1 mA
- Sleep/Wakeup mode
- Low sleep mode current: 6 μ A (typical at Slave)
- ESD protection: HBM (1.5k Ω 100pF) ± 8 kV (BUS pin, BAT pin)
- Over voltage protection: ± 40 V (BUS pin)



Block Diagram

CYPRESS S6BT112A

Part Number	Bus Speed	Power Supply Voltage	Temperature Range (Ta)	Package	Note
S6BT112A	2.4 to 20 kbps	5.3 V to 18 V	-40 to +125°C	8-Pin SOP	Automotive Grade

GET STARTED NOW

For more information on Cypress S6BT112A, please contact your local distributor/reseller or write to us at automotive@cyress.com

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