

RZ Ecosystem Partner Solution

Coosine RZ/G2L System On Module



Solution Summary

Coosine GX-G2L-QSB System on Module (SOM) consists of Renesas [RZ/G2L](#) 64-bit microprocessor, embedded with a Cortex-A55 (1.2GHz) CPU, 16-bit DDR3L/DDR4 interface, 3D graphics engine with Arm Mali-G31 and video codec (H.264). It also equipped with camera input, display output, USB2.0 and Gbit Ethernet, making it ideal for applications such as entry-class industrial HMI and embedded devices with video capabilities.

Features/Benefits

- CPU: Renesas RZ/G2L (64-bit MPU)
- Architecture: Cortex A55 x 2 + Cortex M33
- Frequency: 1.2GHz
- RAM: 16bit 4GB DDR4
- eMMC: 5.1 32GB
- Operating System: Linux

Diagrams / Graphics

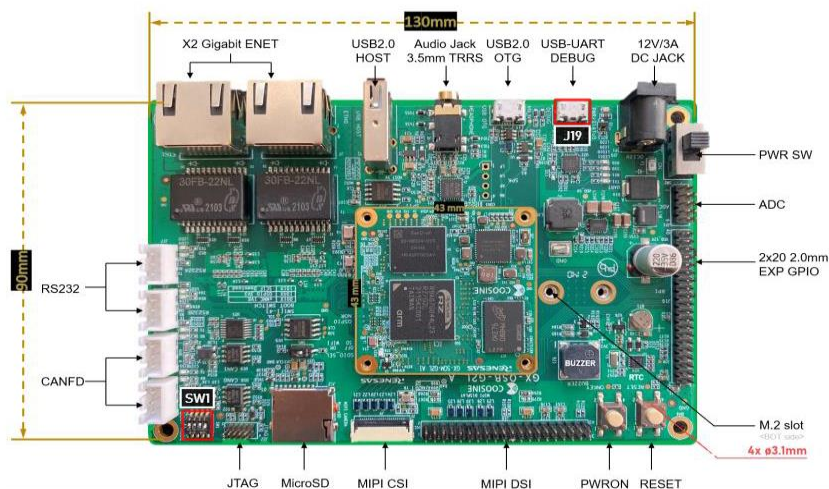


Figure 1: Top view RZ/G2L QSB board

Target Markets and Applications

- Human Machine Interface (HMI)
- Industrial Automation
- Transportation
- Smart City, Smart Home

Coosine RZ/G2L QSB (Back view):

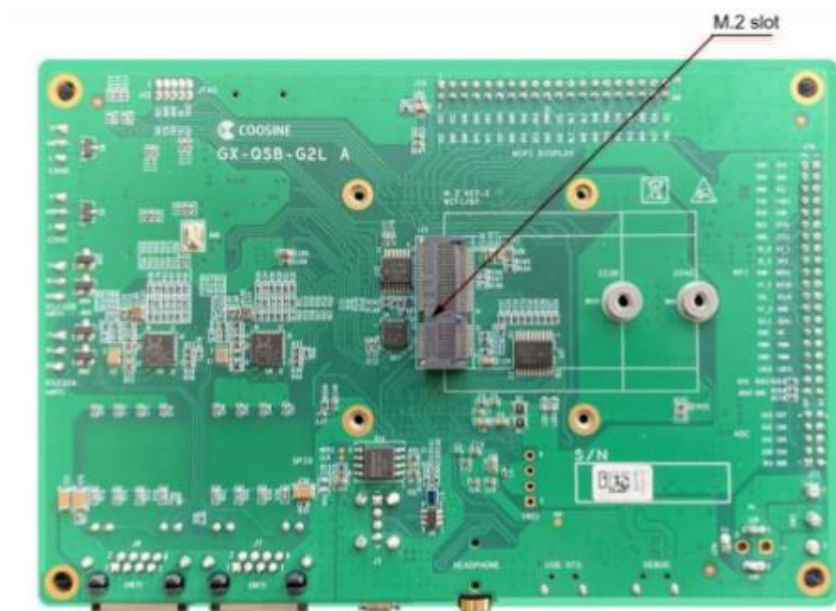


Figure 2: Back view RZ/G2L QSB board

SOM & Base Board Features:

SOM Module:

- ✧ G2L applications processor w/ up to three cores
- 2x Arm® Cortex®-A55
- 1x Arm® Cortex®-M33
- ✧ DDR4-1600 16-bit 4GB
- ✧ eMMC 5.1, 32GB
- ✧ Power Management IC (PMIC)

Base Board:

- ✧ MicroSD 3.0 card slot
- ✧ One USB 2.0 MicroUSB connector
- ✧ One USB 2.0 Type-A connectors
- ✧ M.2 Key-E for Wi-Fi/BT
- ✧ One MIPI-CSI connector for camera
- ✧ Two CANFD port
- ✧ Two RS232 port
- ✧ JTAG HDR support
- ✧ Buzzer support
- ✧ Two 1 Gbps Ethernet
- ✧ x4 Lane MIPI DSI w/ CTP support
- ✧ Multiple Button support:
 - Power ON/OFF button
 - System reset button
- ✧ Audio CODEC support
- ✧ 4-CH ADC support
- ✧ External RTC w/ coin cell
- ✧ x2 UART to USB debug port
- ✧ 2x20 Pin Expansion I/O

Learn more:

http://www.coosine.com/pd.jsp?id=10#_jcp=2