

Development Platform iW-RainboW-G20D-QSeven

RZ/G1M Q7 Development Kit



iWave's RZ/G1M development board incorporates RZ/G1M QSeven SOM which is based on Renesas high performance RZ/G1M Dual ARM Cortex A15 MPU and the carrier board with optional 7" capacitive Display Kit. The development board can be used for quick prototyping of various applications targeted by the RZ/G1M processor. With the 120mm x 120mm Nano ITX size, the kit is highly packed with all the necessary on-board connectors to validate the RZ/G1M MPU features.

APPLICATIONS: Industrial HMI and Access Control , Industrial Control and Automation, Infotainment & Digital Signage, Video Surveillance & Security, Real Time Image Recognition, Home & Office Automation, White Goods and Smart Appliances.

iW-RainboW-G20D-QSeven HIGHLIGHTS

High Performance Dual Cortex - A15 MPU @ 1.5 GHz

SGX544MP2 3D Graphic Core @ 520MHz

Multi - Channel Video input, HD Encode & Decode

USB3.0, Gigabit Ethernet, PCIe, SATA, LVDS IOs

7" Display Kit with Capacitive Touch Screen

SPECIFICATIONS

RZ/G1M QSeven SOM:

RZ/G1M Cortex A15 MPU @ 1.5GHz
1GB DDR3 RAM
2MB SPI NOR Flash
4GB eMMC Flash
10/100/1000 Ethernet PHY

QSeven Carrier Board:

SATA - 1 Port¹
PCIe - 1 Port¹
Gigabit Ethernet - 1 Port
LVDS Display - 1 Port
USB 3.0 Host - 1 Port
USB 2.0 Host - 1 Port
USB 2.0 OTG - 1 Port
SD Slot - 1 Port
7" Display with CAP Touch²

Audio Codec, In / Out Jack

Serial Console on USB Port

Data UART - 1 Port

CAN PHY - 1 Port

IO Expansion Connectors

12V, 2A DC Input

Nano ITX Size: 120mm x 120mm

Camera Daughter Board³ :

16-Bit Camera - 1 Port⁴

8-Bit Camera - 1 Port

Analog Video Input - 1 Port

24bpp RGB Display - 1 Port⁴

OS Support:

Linux 3.10.31

Operating Temperature:

0°C to +60°C

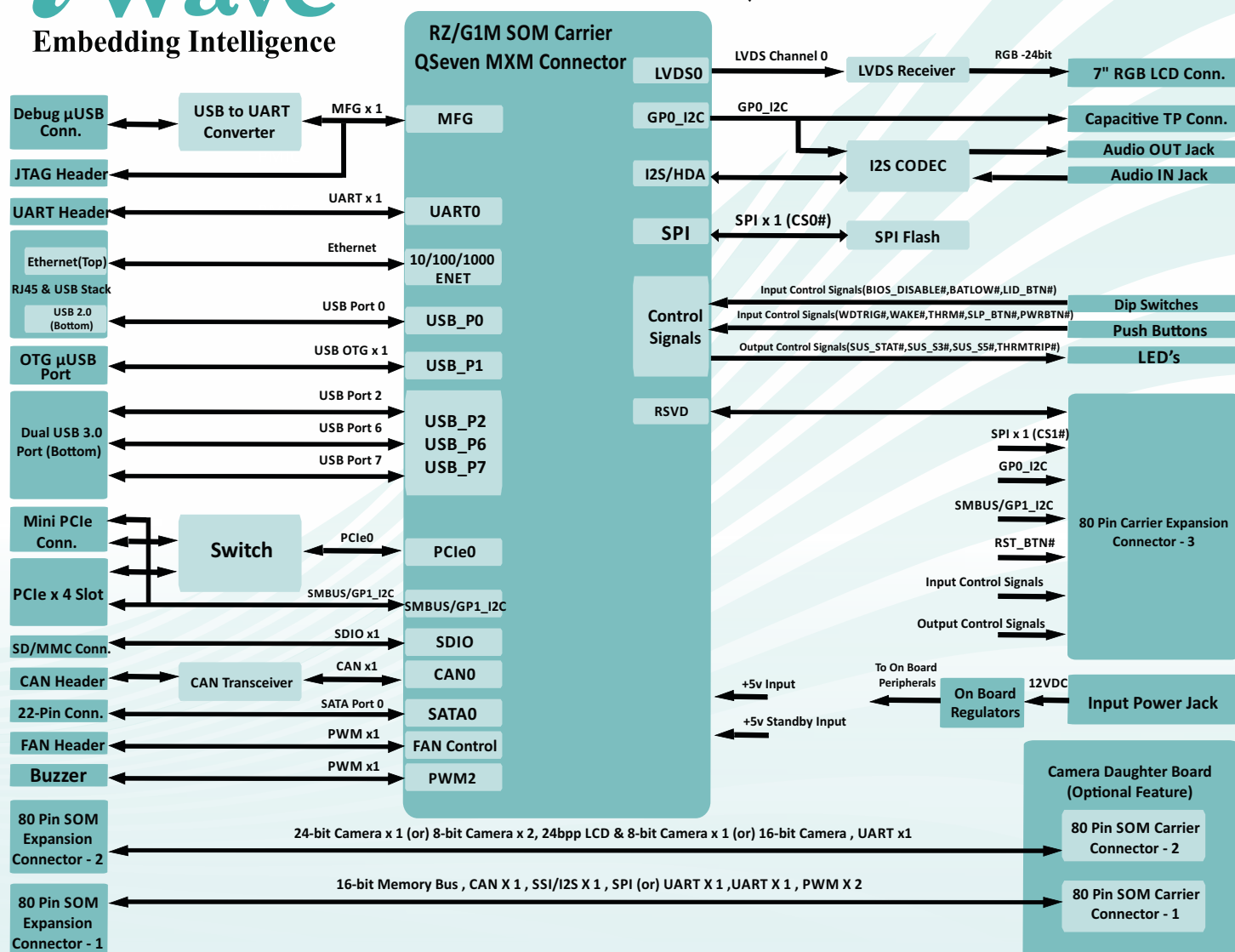
Note1: SATA and PCIe are Multiplexed in the RZ/G1M MPU. Only one be supported at a time. SATA is supported in default configuration.

Note2: 7" Capacitive Display Kit is optional feature.

Note3: Camera Daughter board is optional feature.

Note4: 16-Bit Camera and 24bpp RGB interfaces are Multiplexed. 16-Bit Camera Port is supported by default.

RZ/G1M Qseven Carrier Board - BLOCK DIAGRAM



OS SUPPORT

Linux 3.10.31

DELIVERABLES

RZ/G1M QSeven Development Kit
Board Support Package
Hardware & Software User Manuals

OPTIONAL KITS

7"LCD Display Kit with
Cap Touch Screen
Camera Daughter Board

CUSTOM DEVELOPMENT

BSP Development/OS Porting
Custom SOM /Carrier development
Custom application /GUI development
Design review and support

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iWave Systems has won the confidence of its customers over the years by being a reliable partner in developing innovative products. Our engineers combine outstanding System design experience to deliver Quality Solutions. iWave specializes across Industrial, Automotive and Medical domains. We support our customers by being time efficient, which in turn helps our customers accelerate time to market their products. iWave is a Windows embedded Silver partner and a winner of the Partner Excellence Award.

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**Optional items not included in the standard deliverables.*

Ordering the RZ/G1M QSeven Development Kit

The board can be ordered online from the iWave Website
<http://www.iwavesystems.com/webforms>

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