# Alpha Project

# RZ Ecosystem Partner Solution Alpha Project aSMARC-RZ/G2E



## **Solution Summary**

The  $\alpha$ SMARC-RZ/G2E is a SoM (System on Module) for mass production that is equipped with the "RZ/G2E" MPU manufactured by Renesas Electronics and conforms to the SMARC 2.1 standard. The  $\alpha$ SMARC-RZ / G2E has high-speed interfaces such as USB3.0, PCI Express, and Gigabit Ethernet, and many functions such as LCD and AUDIO, making it ideal for applications such as industrial HMI.

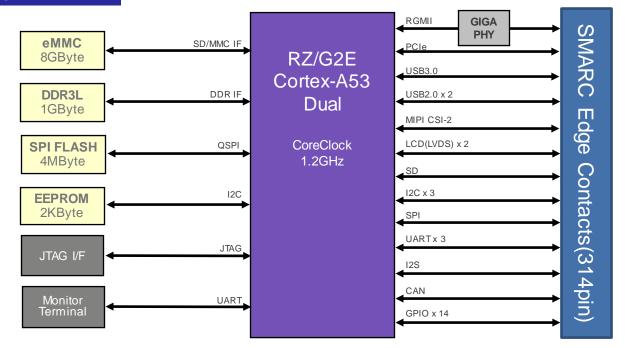
### Features/Benefits

- Arm Cortex®-A53 Dual core RZ/G2E 1.2GHz
- Supports Full HD compatible video encoding/decoding
- Equipped with eMMC and DDR3L memory
- Edge Connector Features (USB3.0/PCle/GigaEther/LCD/AUDIO/CAN)
- SMARC 2.1 compatible (Board size 82mm x 50mm)
- CarrierBoard and Linux BSP available



αSMARC-RZ/G2E

# Diagrams/Graphics



# Target Markets and Applications

- Industrial Controls
- Smart Home
- Home Appliance

- Smart Buildings
- Medical Devices
- Consumer Electronics



# **ALPHA BOARD SERIES**

Edge Computing Solution Boards & Modules

Alpha Project provides small board computers for embedded devices equipped with microprocessors manufactured by Renesas Electronics Corporation as its own brand products.

Our CPU boards have a large variety of product line up are designed for prototyping, evaluation, and small-lot production of loT devices, robots, measuring instruments, and industrial equipment.

They are also used in a wide range of fields, such as training equipment for applications and embedded software, and teaching materials for various educational institutions.

There are also peripherals such as wireless LAN and CMOS cameras, debuggers, and software development support tools for embedded devices.

We are striving to provide a one-stop products necessary for the development.

We will continue to offer products that meet the needs of our customers and propose the higher added value of solutions.

#### **RA Alpha board Series**

# Renesas Synergy™Alpha board Series

**RL78 CPU Board** 













RA6M3

RA6M5

S3A7

S5D9

\$7G2

**RL78/G1D** 

#### **RZ Alpha board Series**













RZ/A1H

RZ/A1H

RZ/A2M

R7/T1

RZ/N1D

RZ/G1E

#### **RX Alpha board Series**













RX72N

RX72M

DV71M

RX65N

RX64M

RX63N

#### SuperH Alpha board Series













SH7144

SH7211

SH7216

SH7269

SH7780B

SH7734

In addition to the above, we also have a variety of CPU boards. For more information, please visit our website.

URL: <a href="https://www.apnet.co.jp/">https://www.apnet.co.jp/</a> e-mail: sales@apnet.co.jp