



Musashi

Instruction Manual

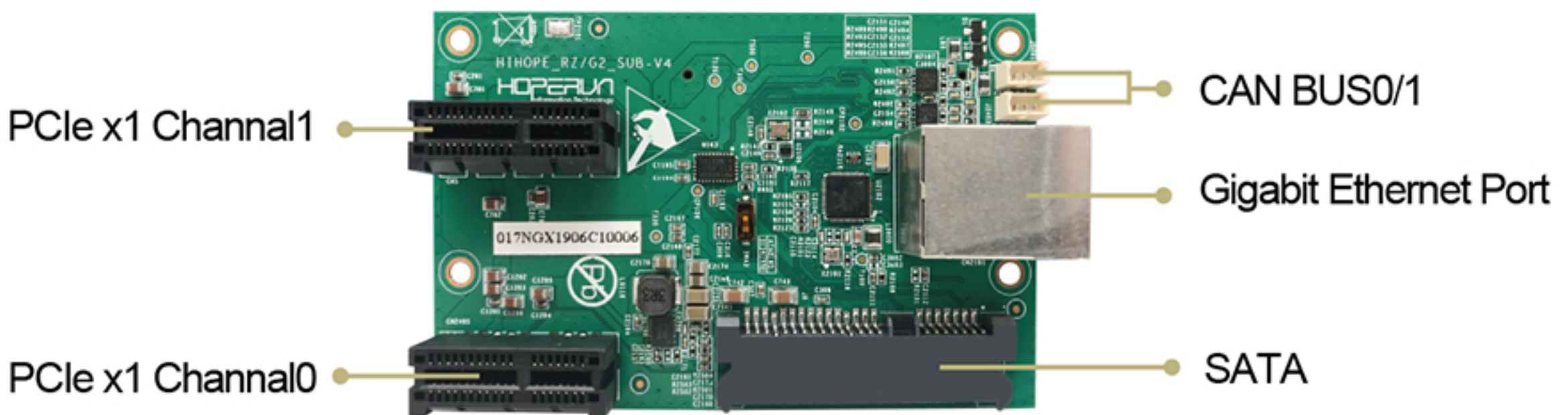
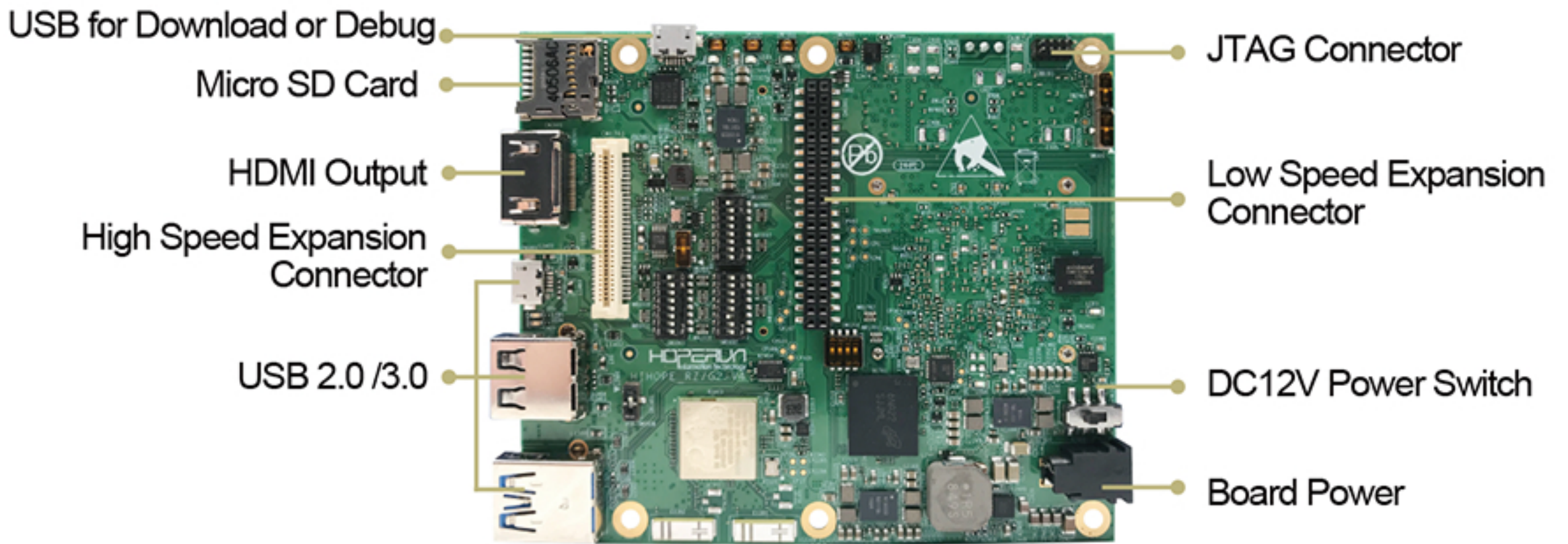
Making Innovation Easy

Introduction

- ▶ Calculation performance of about 23.3 thousand DMIPS
- ▶ ECC support for both L1/L2cache, DDR/IF
- ▶ 384 KB System RAM
- ▶ Built-in high-speed interface(USB3.0, PCI-e, Gbit-Ether)
- ▶ 4K compatible H.265 decoder, H.264 decoder / encoder installed
- ▶ Equipped with 3DGfx engine Power VR ideal for embedded devices
- ▶ Security function for communication, data and program protection

Specification

Component	Description
SoC	RZ/G2M(R8A774A)
CPU	ARM® Cortex®-A57×2 and Cortex®-A53×4
GPU	Imagination Technologies PowerVR Series 6XT GX6250@700 MHz
Memory	4GB LPDDR4 SDRAM
Storage	32GB eMMC
Wireless	WiFi(2.4 -and 5-GHz dual band with two antennas), Bluetooth 4.1
USB	1×USB 3.0 type A(Host/Function) 1×USB 2.0 type A(Host) 1×USB 2.0 Micro(Host/Function/OTG)
Display	1×HDMI1.4 (Type A -full), HDMI out up to FHD 1080P, 1×4L - MIPI DSI
Video	MPEG2@80Mbps, MPEG4@50Mbps H.264@240Mbps, H.265@160Mbps VP8@100Mbps, VP9@120Mbps
Audio	HDMI Output
Camera	1×2-lane MIPI CSI, 1×4-lane MIPI CSI
Expansion Interface	40 pin Low Speed Expansion Connector:+1.8V, +5V, DC power, GND, 2UART, 2×I2C,SPI,I2S, 12×GPIO 60 pin High Speed Expansion Connector:4L-MIPI DSI, 2×I2C, SPI(48M),USB 2.0,2L +4LMIPI CSI
LED	WiFi activity LED, BT activity LED, User LED
Button	Power Button: Button Power on /off & Reset the system
OS Support	AOSP/LINUX



Attention

- ▶ We recommend a 12V@2A adapter with a DC plug which has a 4.75mm outer diameter and 1.7mm center pin with standard center-positive (EIAJ-3 Compliant).
- ▶ The Micro-USB OTG port and the Type-A USB3.0 host ports cannot be used simultaneously.
- ▶ Do not touch any IC on the board when power on.

Resource

Product Information

<http://www.hihope.org/hihope/downloadCenter/index?productName=Musashi&page=1&pageSize=10>

Documentation

<https://www2.renesas.cn/cn/zh/products/microcontrollers-microprocessors/rz/rzg/rzg2m.html#productInfo>