



iWave's Arria 10 SoC System on Module is based on the Arria 10 SX family device with F34 package. The module is equipped with 32-bit DDR4 memory support for HPS with ECC and 64-bit DDR4 support for FPGA. All the IOs and high speed transceiver blocks will be available on the SOM board to board connectors.

APPLICATIONS: Test and measurement equipment, Control and intelligence equipment, Diagnostic medical imaging equipment, Wireless infrastructure equipment, Compute and storage equipment, Broadcast and distribution equipment.

iW-RainboW-G24M

HIGHLIGHTS

Arria10 SOC & FPGA device compatibility

- SX270, SX320, SX480, SX570, Sx660
- GX270, GX320, GX480, GX570, Gx660

4GB DDR4 for FPGA

24 high speed transceivers @ 17.4Gbps

48/96 LVDS from BANK 3B & 3C

93 SE from BANK 2A & 3A

Industrial grade availability

10+ Years availability

SPECIFICATIONS

SOC: Arria10 SoC/FPGA

Dual Core, Cortex - A9 CPU @ 1.5GHz
SX480 (10AS048) FPGA Fabric

Memory

2GB DDR4 with ECC for HPS
4GB DDR4 for FPGA
Micro SD for HPS boot
8GB eMMC Flash for HPS boot (Optional)
QSPI Flash for FPGA

Communication:

10/100/100 Ethernet PHY For HPS
USB2.0 transceiver for HPS

Power Supply:

5V through SOM B2B connector 2

Temperature support:

-40°C to +85°C Industrial

Dual 240 Pin Board to Board Connector:

Arria10 SoC HPS IO interfaces:

Gigabit Ethernet x 1 Port
USB 2.0 OTG x 1 Port
SD (4bit) x 1 Port (optional)
SPI x 1 Port
I2C x 1 Port

HPS Dedicated UART Console
GPIOs-14 Nos

Arria10 SoC FPGA IO interfaces:

24 high - speed transceivers
48/96 LVDS from BANK 3B & 3C
93 SE from BANK 2A & 3A

Headers: HPS/FPGA JTAG, FPGA AS headers

OS Support: Linux 4.9.78

Form Factor: 95mm x 75mm

