



FUTURIS

Ethernet Stream Multiplexer With 10G

There are six independent Layer 3 Ethernet switches (SW1, SW2, SW3, SW4, SW5, and SW6) in the ESM. Ethernet communication on all ports uses the UDP protocol. The ESM integrates six internal Ethernet switches, one 10GBASE-T Ethernet port (#7), and one internal Ethernet Stream Multiplexer (ESM).

I/O Connections

- Ethernet – 15x 1000Base-T
- Ethernet – 1x 10GBASE-T
- DEBUG Ethernet – 1x 10/100
- Serial – 1x RS422, 1x RS485
- 1x Debug UART
- 1X MIL-STD-1553B
- 1X ARINC429

Architecture

- Application Processing Unit – 64-bit Cortex-A53
- Real-Time Processing Unit – 32-bit Cortex-R5
- Graphic Processing Unit – ARM Mali™-400 MP2
- Embedded/External Memory – 256KB On-Chip RAM, DDR4-2400 (64-bit) on PS-Side, DDR4 2400 (16bit) on PL-Side, QSPI, eMMCVideo Codec Unit (VCU) – H.264/H.265

Enclosure

- Power – DC 28±5 Volt MIL-STD-1275E
- Power Consumption <30W
- Dimensions – 200 x 170 x 130 mm

Additional Connections

- JTAG
- Micro SD

