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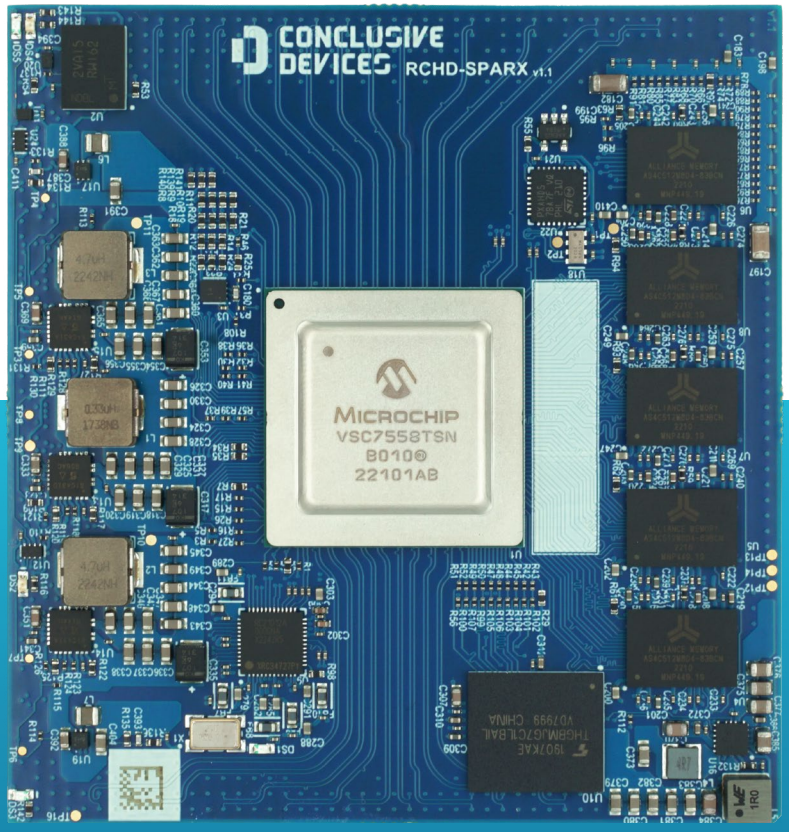
CONCLUSIVE ENGINEERING

RCHD-SPARX
Networking Switch SoM



RCHD-SPARX

- 1 GHz Dual-Core Arm® Cortex®-A53 Processor
- Up to 4 GB DDR4 RAM
- Up to 200 Gbit/s switching throughput
- Up to 65 Configurable Ethernet Ports
- Advanced Features:
  L2/L3 Switching, QoS, PCIe 3.0, TSN, SyncE, optional TPM 2.0

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RCHD-SPARX Specifications	
SoC	Microchip SparX-5 Ethernet Switch - VSC7552, VSC7556, VSC7558, VSC7546, VSC7549
CPU Architecture	1 GHz dual-core Arm® Cortex®-A53 Arm® Cortex®-M3
Memory	DDR4 SDRAM with ECC support (1, 2 or 4 GB)
Ethernet	64, 90, 128, 160, 200 Gbit/s total switching bandwidth 65 Configurable Ethernet ports Sample configuration: 8x 25 Gbit/s + 12x 10 Gbit/s + 24x 2.5 Gbit/s Support for QSGMII, USGMII, USXGMII, HSGMII, SGMII, 10GBASE-R, 25GBASE-R
Mass storage	eMMC (4 – 64 GB) EEPROM (32 KB) SPI NOR flash for bootloader (32 MB) Optional M.2 NVMe via baseboard
PCIe	1x 3.0 PCIe configurable as root complex or endpoint mode
Other Interfaces	SPI I2C GPIO
Debug	JTAG
Software support	Linux 6.1 & 6.5 U-Boot Yocto Buildroot Ubuntu FreeBSD (on request)
Additional features	IEEE1588, TSN, RTC, TPM 2.0 optional
Power supply	5 V
Dimensions	75 x 80 mm

Baseboards	1U rack mounted form factor
Baseboard A:	8x 25 GbE SFP28 12x 5 GbE RJ-45 PoE++ 12x 10 GbE RJ-45 PoE++
Baseboard B:	8x 25 GbE SFP28 48x 1 GbE RJ-45 PoE++
Baseboard C:	8x 25 GbE SFP28 12x 10 GbE SFP+ 12x 5 GbE RJ-45 PoE++

About Conclusive Engineering

We provide reliable development and consulting services for various embedded platforms, assisting enterprises and manufacturing companies in optimizing their processes through tailored embedded system services, products, and hardware solutions.

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