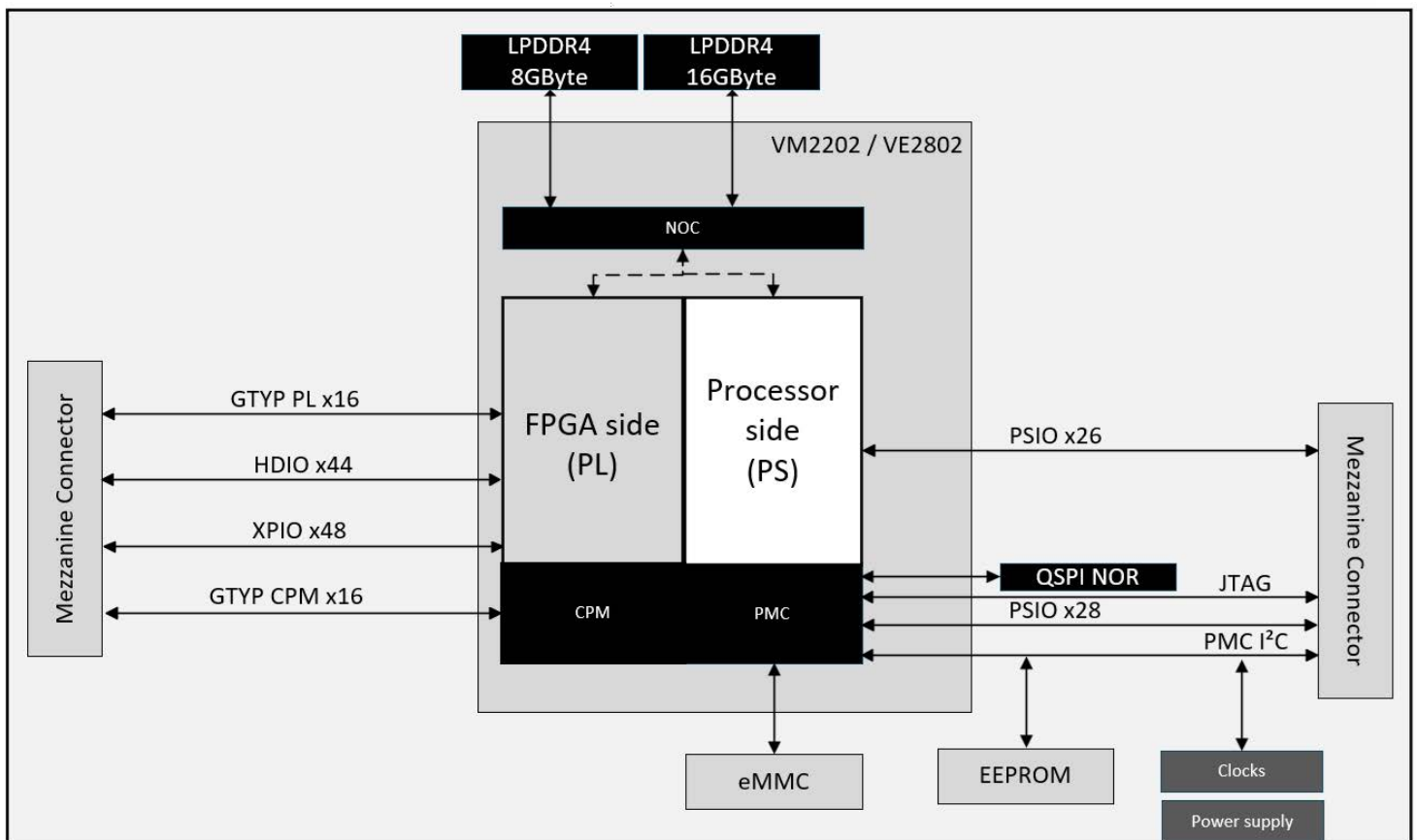
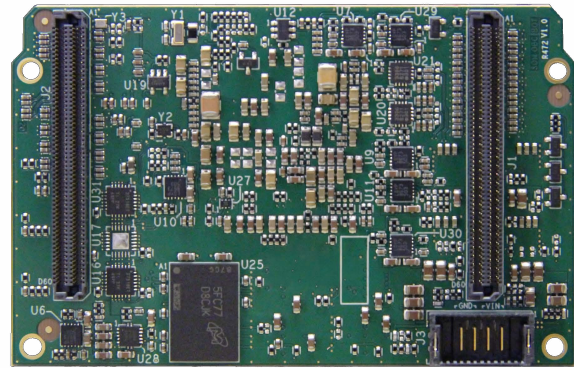
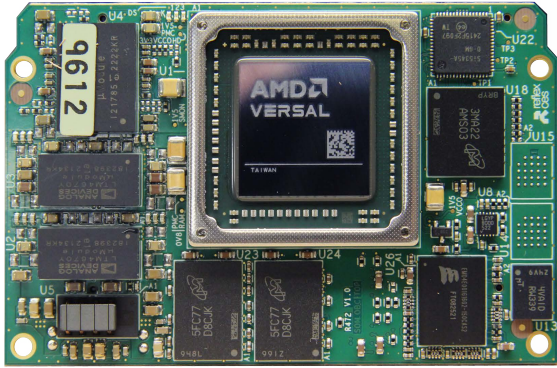


Vulcan Versal™ Prime / AI Edge Adaptive SoC System-on-Module



- AMD Xilinx® Versal™ Prime or AI Edge Adaptive SoC
- VM2202 / VE2802
- 2x PCIe Gen4 x8 End Point or Root Port
- Dual Core ARM Cortex A-72 and Dual Core ARM Cortex R5F

- 16 transceivers @25Gbps, PCIe Gen4x16
- 44x HDIO + 48x XPIO
- 2x LP-DDR4
- Industrial Temp Grade
- Long Term Supply

- Bioscience & Instrumentation
 - Quantum Computing
 - AI Vision Analytics
- Embedded Airborne Systems
 - Radar Systems
 - Electronic Warfare

Features	Vulcan System-on-Module	
Ordering Information	RXCVM2202PH35-SOM001 Availability: NOW using Versal™ Prime VM2202	RXCVE2802PH35-SOM001 Availability: September 2026 using Versal™ AI Edge VE2802
Adaptive SoC	Versal™ Prime VM2202: 1140 KLC, UltraRAM 74Mbit, 1312 DSP Engines	Versal™ AI Edge VE2802: 304 AI-Engines, 1140 KLC, UltraRAM 74Mbit, 1312 DSP Engines
	Dual Core Arm Cortex-A72, Dual Core Arm Cortex-R5F Speed grade 1, Industrial temp grade	
External Memory	Connected to the NOC = 1x LPDDR4 x64bit bus, 16GByte, @2400MT/s 1x LPDDR4 x32bit bus, 8GByte, @2400MT/s	
Mezzanine Connectors	16 transceivers GTYP @25Gbps + 16 transceivers GTYP CPM PCIe Gen4 44 HDIO maximum 48 XPIO maximum	
Storage	2Gbit Quad SPI Flash 128Gbyte NAND Flash eMMC (Stores U-Boot, Linux Kernel, and RootFS) 2Gb QSPI NOR Flash 128Kbits EEPROM	
PS Communication & Networking	54 PSIO (PMC and PS)	
Mechanical & Environmental Specification	EMI immunity : TBD; EMI emission : TBD, Vibration : TBD; Shock :TBD Power: 5V +/- 10% Industrial components temperature grade -40°C to +85°C UL 94-V0 compliant components	
Power & Dissipation	Total power estimated at 66W passive heatsink (heat spreader + heatsink)	Total power estimated at 89W passive heatsink (heat spreader + heatsink)
Board Management Controller (via Versal PMC)	Communication with Carrier board: PMC I2C, JTAG Communication with FPGA : UART to FPGA Monitoring : Current, voltages, temperature, ID information Programming : Clock Control: Power, temperature protection	
Module dimensions and weight	84mm x 54mm (3.3 x 2.1 inches) weight SOM + heat spreader: 190g weight SOM + passive heat sink: 333g weight SOM + active heat sink (with fan): 385g	
Compliance	RoHS/REACH compliant	
Deliverables	- Vulcan module & its passive cooling system - Board Support Package (to download from our online technical support) after purchase of a module and its carrier board: - Starter Guide, module and carrier board Reference Manuals, Interconnect pinout file - Mechanical drawings, assembly files - FPGA test design (vivado 2025.1 version) - PS Software: -Build with: PetaLinux BSP -U-boot bootloader 1-year technical support and warranty - Online support at support.reflexces.com (after purchase of a kit)	
MOTS = Modified version (on request)	- Conformal coating - Custom heatsink system - Contact sales for customization	

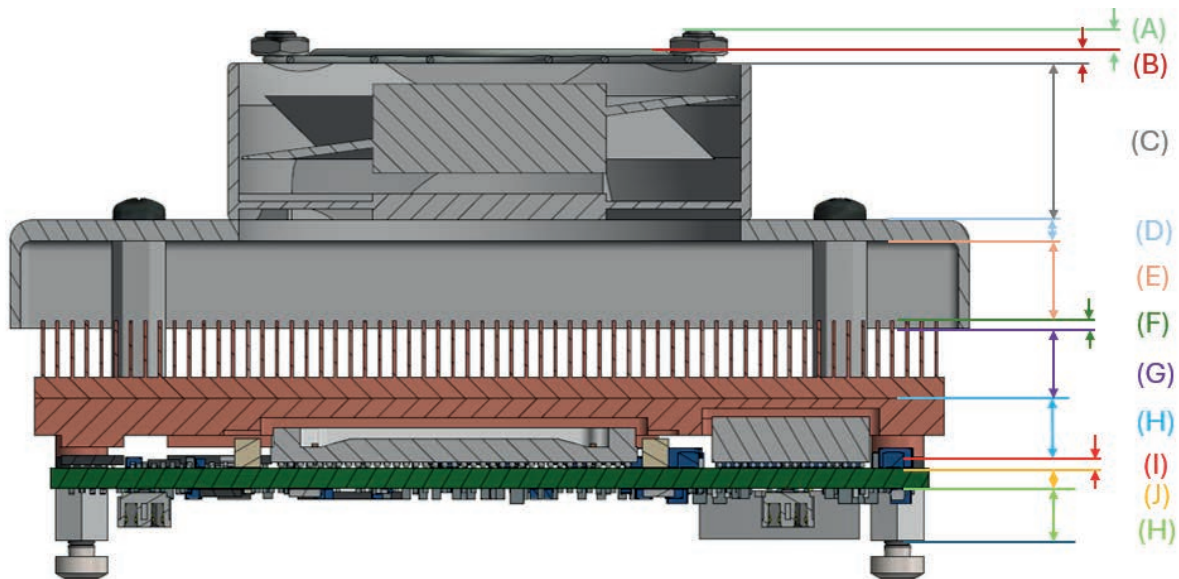
Thermal dissipation

Module dimension: 84mm x 54mm (3.3 x 2.1 inches)

Module + heatsreader: 13.60mm

Module + heatsreader + passive heat sink: 21mm

Module + heatsreader + active heat sink: 48.6mm



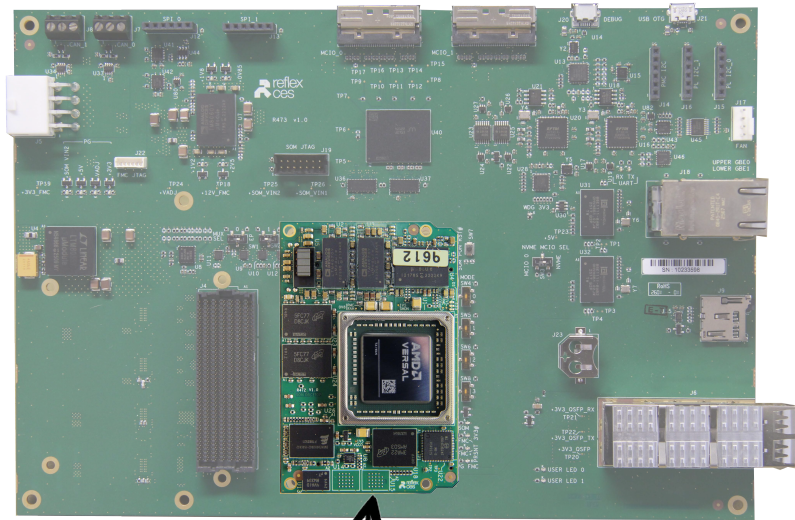
A	Top screw	1,70mm
B	Fan Grill	1,30mm
C	Fan Height	15,00mm
D	Thickness Top of support	2,00mm
E	Gap between the bot of the support and the interior support height	8,30mm
F	Space between heatsink and bot of support	0,70mm
G	Heatsink	7,40mm
H	Heatspreader	5,60mm
I	Washer	1,00mm
J	Board	2,00mm
H	Spacer	5,00mm

Related product: Carrier Board

The Vulcan Carrier board is sold separately

Ordering information: RXCVER-CBD0SA

Dimensions : 233.35mm x 160mm



with Vulcan
Versal™ Prime / AI Edge Adaptive SoC module