

KRM-3EZUxxCG

KEY FEATURES

- AMD Zynq MPSoC Ultrascale+ series
- Dual 64-bit ARM A53 cores
- 2 or 8 GB PS RAM
- 512 MB or 2 GB PL RAM
- 192 GPIO
- 4 PS GTR on-SoM
- 4 PL GTH transceivers



The KRM-3eZUxxCG: the eVolution of a legendary SoM

eVolution of a Legend

The KRM-3eZUxxCG is an update to the original KRM-3 SoM family dating back to 2013.

The eVolution range of SoMs re-purposes unused GTx lanes to implement KR's modern system-housekeeping bus. The on-SoM GTP connector has been updated to support a top-mounted NVMe adapter that can accept small SSDs or LTE modems, making the KRM-3e range of SoMs the ideal platform for datalogging or IOT designs.

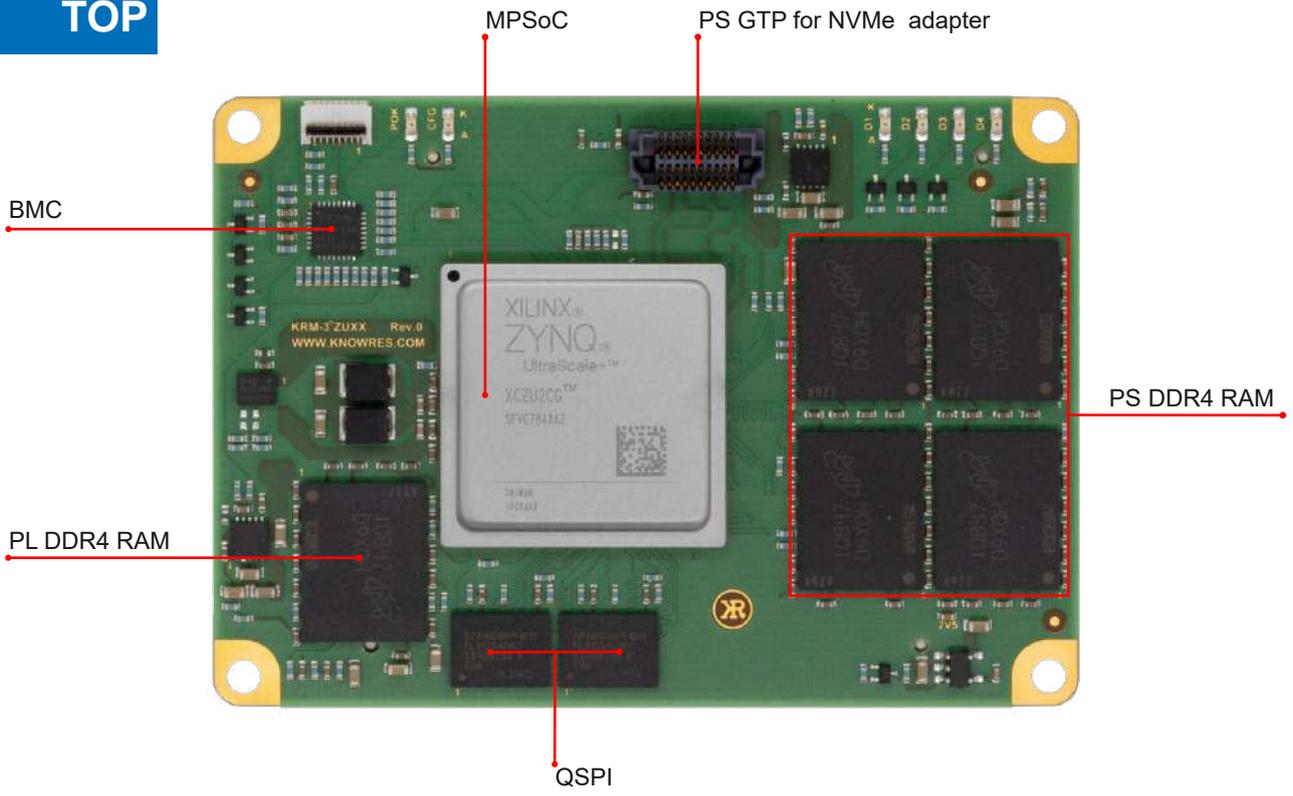
Highest GPIO Count

As in the original KRM-3 design, exposing 192 PL-I/Os and the PS-MIO bank 501 on X1 and X2 maintains the SoM's maximum flexibility. Since the PS peripherals are not predetermined by the SoM, the designer has the freedom to choose the mix of peripherals best suited for the application.

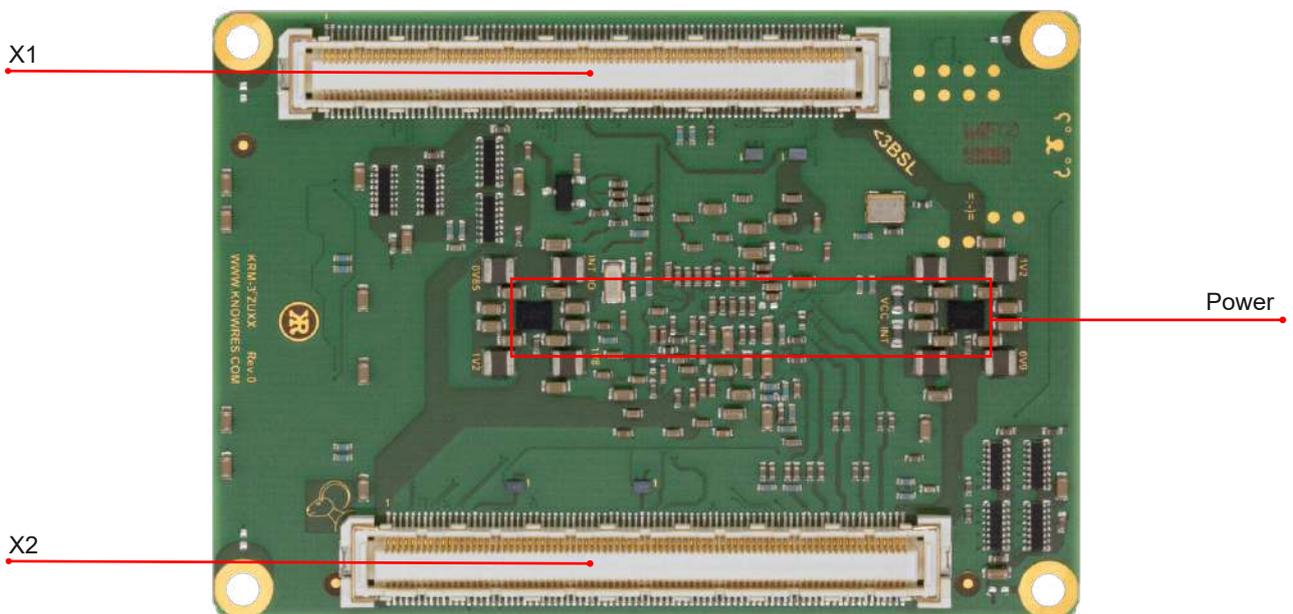
Highest DRAM Density

The KRM-3eZUxxCG modules offer the highest RAM density with up to 8GB for PS and up to 2GB DDR4 RAM on PL for a SoM based on the lower pin-count AMD MPSoC devices. The extra RAM, coupled with the optional on-SoM NVMe drive, allow for more complex software than any other SoM in its class.

TOP



BOTTOM



FEATURES

Core Component Options

□ AMD XCZU4CG or XCZU5CG in FSVG784 package

Processing System

- DUAL Core ARM A53
- DUAL Core ARM R5

Memory Configuration

- 2 or 8 GB, 64-bit PS DDR4 RAM
- 512 MB or 2 GB 16-bit PL DDR4 RAM
- 512 Mb Dual QSPI

Digital I/O

- 96 HD bank I/Os (1V8 to 3V3)
- 96 HP bank I/Os (1V5 to 1V8)
- 40 MIO (1V8)
- 4x GTH 12.5 Gbps transceivers
- 4x PS GTR 6 Gbps on-SoM transceivers
- BMC UART PS UART
- BMC status signals
- JTAG

BMC

- Board Management Controller for
 - Power sequencing & telemetry
 - Boot mode selection
 - Housekeeping for multi-module systems

Power

- 3V3

Dimensions

- 70 x 50 mm
- 15 mm max. height with heat spreader

Environmental

- Commercial or industrial temperature range

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