

iG-G74M®

Kintex™ Ultrascale+™ FPGA oHFM System on Module

iWave's Kintex™ UltraScale FPGA System on Module is a high-performance FPGA computing platform designed for bandwidth-intensive and compute-demanding embedded applications. Built on AMD/Xilinx Kintex™ UltraScale and UltraScale+ FPGA architecture, the SoM combines powerful programmable logic, high-speed transceivers, and integrated processing capabilities in a compact and scalable form factor.

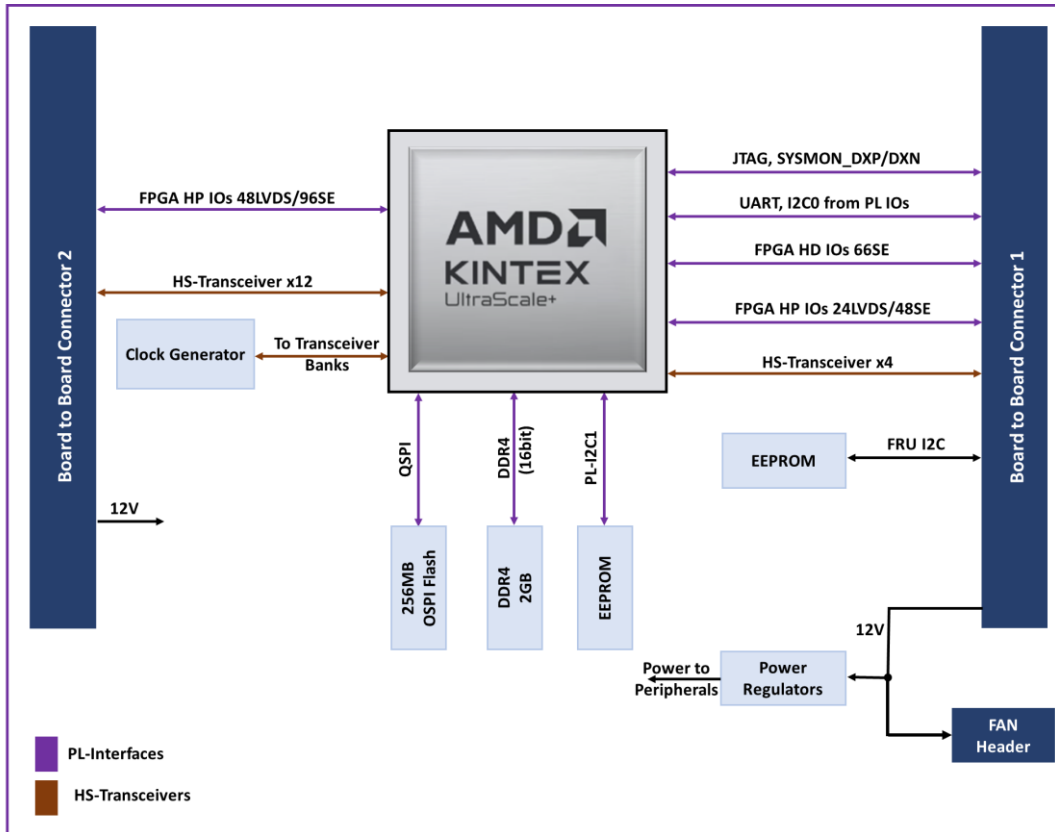
The module supports advanced connectivity, high memory bandwidth, and extensive I/O expansion, enabling accelerated development for applications requiring real-time processing and low-latency performance.



Highlights

- ❖ AMD Kintex™ Ultrascale+™ SOM Compatible with KU5P/KU3P
- ❖ Up to 474K Logic cells & 216K LUTs
- ❖ 16 channels of GTY transceivers up to 32.75Gbps
- ❖ 72 LVDS IOs / 144 SE IOs from HP Bank and 66 SE IOs from HD Bank
- ❖ Two 320pin High Speed B2B Connectors
- ❖ Open Harmonized FPGA Module(oHFM) Form Factor: 50mm x 75mm

Block Diagram



Technical Specifications

SoC	• AMD Kintex US+ SOM Compatible with KU5P/KU3P • Up to 474K Logic cells & 216K LUTs • GTY Transceivers x 16 @32.75Gbps • 72 LVDS IOs / 144 SE IOs from HP Bank and 66 SE IOs from HD Bank	Board to Board Connector2 Interfaces (320pin)	• 12 channels of GTY transceivers up to 32.75Gbps • 24LVDS/48SE IOs Pairs from HP-BANK 65 • 24LVDS/48SE IOs Pairs from HP-BANK 66
Memory & Storage	• 16-bit 2GB-DDR4 from HP-BANK 67 • 256MB QSPI Flash	PMIC	Dialog's DA9062 PMIC with RTC
Board to Board Connector1 Interfaces (320pin)	• EEPROM • 4 channels of GTY transceivers up to 32.75Gbps • 24LVDS/48SE IOs from HP-BANK 64 • 18SE IOs from HD-BANK 87 • 24SE IOs from HD-BANK 86 • 24SE IOs from HD-BANK 84 • JTAG • SYSMON_DXP/DXN, UART, I2C	Clock	Clock Synthesizer
		BSP Support	Vivado 24.2
		Power Input	12V through B2B Connector 1 & 2
		Operating Temperature	-40°C to +85°C (Industrial Grade)
		Form Factor	50mm x 75mm Open Harmonized FPGA Module (oHFM)
		Environment Spec.	REACH & RoHS3 Compliant
		Compliance	CE*

A Global Leader in Embedded Systems Engineering and Solutions

Since 1999, we have pioneered leadership in embedded systems technology, establishing ourselves as a strategic embedded technology partner for advanced solutions. Our comprehensive portfolio encompasses ARM and FPGA System on Modules, COTS FPGA solutions, and ODM solutions which include Telematics, Gateways & HMI Solutions.

Beyond our robust product ecosystem, we provide comprehensive ODM support with specialized custom design and manufacturing capabilities, enabling customers to accelerate and optimize their product development roadmaps. With a strategic focus on industrial, automotive, medical, and avionics markets, we deliver innovative technology solutions to global clients.

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