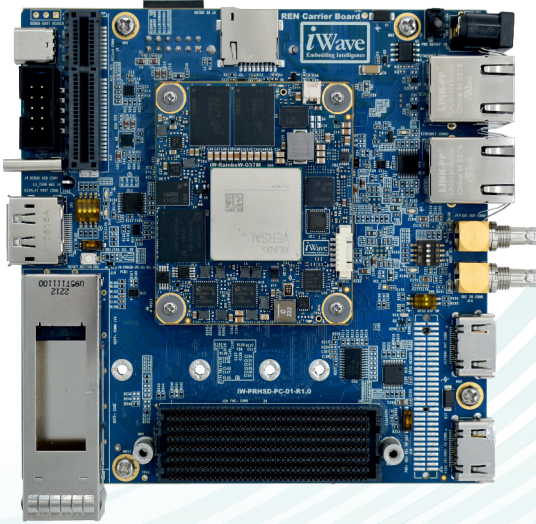


# Development Kit iW-RainboW-G57D

## Versal AI Edge/Prime SoC Development Kit



iWave's Versal AI Edge/Prime SoC development kit comprises of the Versal AI Edge/Prime SOM and REN Carrier board. The SOM is equipped with a 64-bit 4GB LPDDR4 RAM.

The Versal AI Edge/Prime SoC development kit carrier board supports a required set of feature like FMC+ (HSPC), HDMI IN/OUT, SDI Video IN/OUT and 12-pin PMOD connector to validate Versal AI Edge/Prime SoC PL interfaces.

**Applications:** Autonomous driving, Wire & Wireless application, Embedded computing, Application requiring AI Engine and AI Engine-ML.

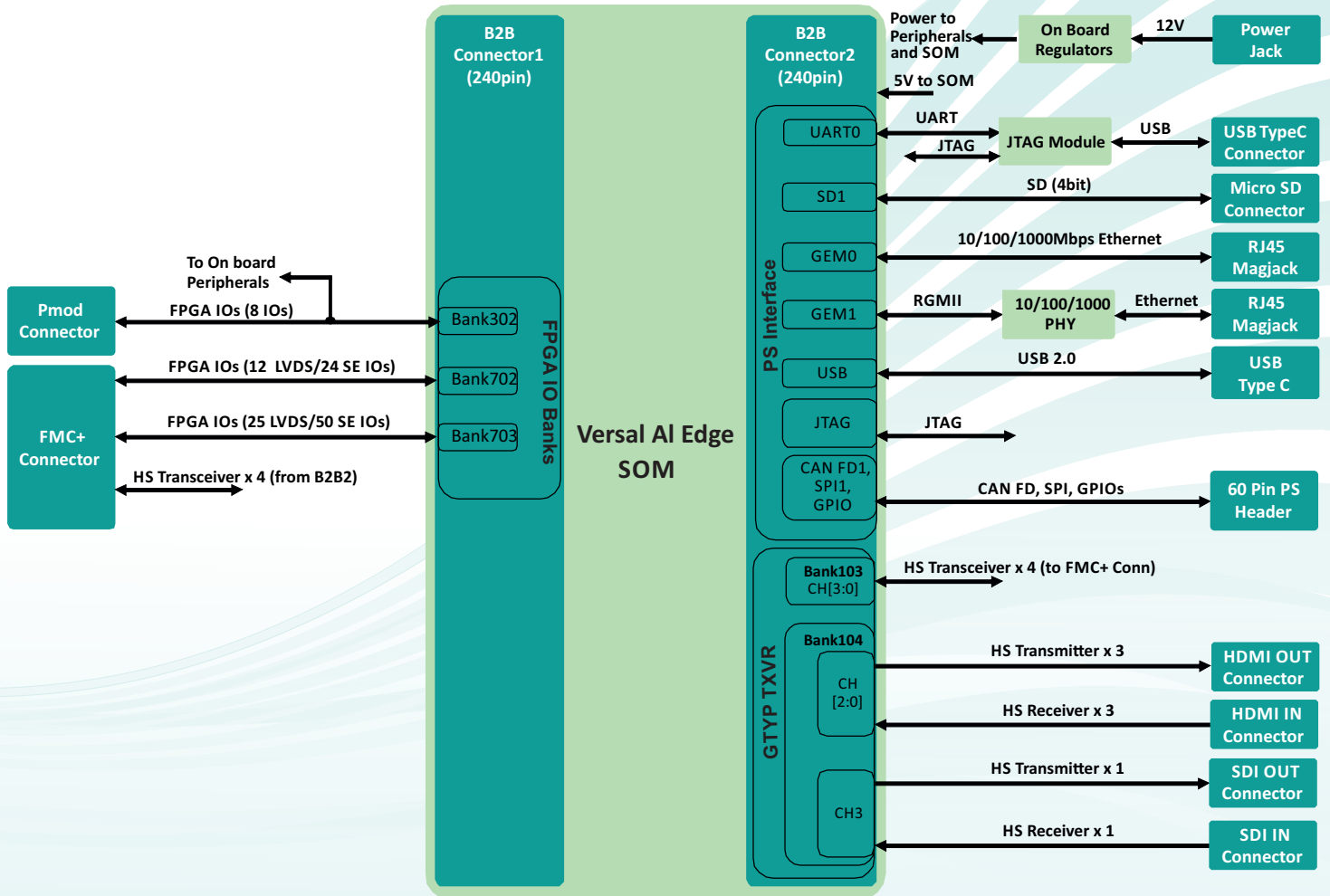
### iW-RainboW-G57D HIGHLIGHTS

- Versal AI Edge/Prime SoC with 328.72K Logic Cells
- GTYP Transceiversx 8 @ 32 Gbps
- FMC+ HSPC Connector
- 4K HDMI 2.0 IN Connector
- 4K HDMI 2.0 OUT Connector
- 12G SDI Video IN connector
- 12G SDI Video OUT Connector
- 12-Pin PMOD Connector
- Duel 1G Ethernet

### SPECIFICATIONS

<b>Versal AI Edge/Prime SOM:</b>	<b>PL-Interfaces:</b>
Xilinx's Versal AI Edge/Prime SoC	FMC+ HSPC Connector x1
Dual- Core Arm Cortex A72 @ 1.7GHz	HDMI IN Connector x1
Dual - Core Arm Cortex R5F upto 750MHz	HDMI OUT Connector x1
Dual PMIC with one RTC support	SDI Video IN Connector x1
4GB LPDDR4 RAM	SDI Video OUT Connector x1
16GB eMMC Flash (Upgradable)	12-Pin PMOD Connector x1
256MB QSPI Flash (Upgradable)	<b>Power Supply</b>
GTYP Transceiver x 8 @32Gbps	12V Power Connector x1
Gigabit Ethernet PHY Transceiver	<b>Switches</b>
USB2.0 PHY Transceiver	Reset Button x1
FAN Header	Power ON/OFF Switch x1
<b>REN Carrier Board:</b>	Boot Mode Selection Switch x1
<b>PS-Interfaces:</b>	<b>Operating System</b>
1Gb Ethernet PHY with MagJack Connector x1	Linux
1Gb Ethernet MagJackConnector x1	<b>Form Factor</b>
USB 2.0 Type-C Connector x1	120mm x 120mm
Debug/JTAG USB Type-C Connector x1	<b>Operating Temperature</b>
Micro SD Connector x1	0°C to +70°C (Commercial Grade )
60-Pin GPIO Header x1	<b>Compliance:</b>
RTC Holder x1	RoHS Compliant , REACH Compliant & CE*

## Versal AI Edge/Prime SoM Development Kit Block Diagram



### OS SUPPORT

Linux version 6.1.30  
Xilinx-v2023.1

### DELIVERABLES

Versal AI Edge/Prime Development Kit  
Linux 6.1.30 BSP  
12V AC-DC Adapter  
HW/SW Data Sheets  
Quick Start Guide

### OPTIONAL KITS/Modules

PMOD Module  
FMC+ Loopback Modules

### CUSTOM DEVELOPMENT

BSP Development/OS Porting  
Custom SOM/Carrier Development  
Custom Application/GUI Development  
Design Review and Support

iWave Systems Technologies is an ISO 9001:2015 certified company, head quartered in Bangalore India established in the year 1999. The company focuses on providing embedded solution and services for Industrial, Medical, Automotive and various other Embedded Computing applications. iWave Systems offers wide range of System On Modules and Single Board Computers built using wide range of CPU and FPGA SoC platforms with different form factors such as Qseven, SMARC, SODIMM and HPC by closely working with Tier-1 silicon companies such as NXP, Xilinx, Intel etc.

iWave Systems offers various state of art ready ODM solutions such as Connected Telematic Control Unit / OBD II devices for the automotive edge analytics, Comprehensive ARINC818 solutions for the low latency Aerospace applications and Rugged IP rated performance scalable HMI solutions for Industrial applications.

iWave Systems also provides comprehensive Engineering design services involving Embedded Hardware, FPGA and Software development. iWave offers carrier board and custom hardware development with manufacturing and certification services. iWave's Hardware expertise spans complex board design up to 30 layers; Analog, Digital & RF Designs; FPGA Development up to 3+ million gates and VHDL / Verilog RTL Development & Verification. Our Software expertise ranges from OS Porting, Firmware & Device Drivers Development and Wireless & Protocol

\*Optional items not included in the standard deliverables.

Note: iWave reserves the right to change these specifications without notice as part of iWave's continuous effort to meet the best in breed specification. The registered trademarks are proprietary of their respective owners.

### Versal AI Edge/Prime SOM & Development Kit

The device can be ordered online from the iWave Website  
<https://www.iwavesystems.com/product/versal-ai-edge-or-prime-som/>  
Or from our Local Partners in your region  
<http://www.iwavesystems.com/about-us/business-partner.html>

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