

Development Platform iW-RainboW G35D

Zynq Ultrascale+ MPSoC Development kit



iWave's Zynq Ultrascale+ SoC Development kit comprises of Xilinx's Ultrascale+ MPSoC SOM and Ultra-High-Performance carrier card. The SOM is equipped with 64-bit 4GB DDR4 RAM with ECC for PS & 64-bit 4GB Dual DDR4 RAM for PL. The Zynq Ultrascale+ MPSoC development kit carrier board supports required set of features like FMC+ (HPC), FMC (HPC), FireFly, QSFP, SFP+, 12-Pin Pmod, and HDMI- IN/OUT connectors to validate Zynq Ultrascale+ MPSoC high-speed PL interfaces and PCIe x4, SATA, USB-Type-C, Display Port, Gigabit Ethernet and SDI Video IN/OUT on-board connectors to validate the Zynq Ultrascale+ MPSoC high-speed PS interfaces.

Applications: Artificial intelligence, Broadcast audio/video, HPC, Desegregated computing, 5G wireless, 100G connectivity

iW-RainboW G35D HIGHLIGHTS

Zynq Ultrascale+ MPSoC with 1143K Logic Cells

PS -GTR Transceivers x 4 @ 6Gbps

PL -GTH Transceivers x 32 @ 16.3Gbps

PL -GTY Transceivers x 16 @ 32.735Gbps

FireFly Connector

FMC+ HPC Connector

FMC HPC Connector

QSFP & SFP+ Connector

Dual 12 -Bit Pmod Connectors

HDMI - IN/OUT

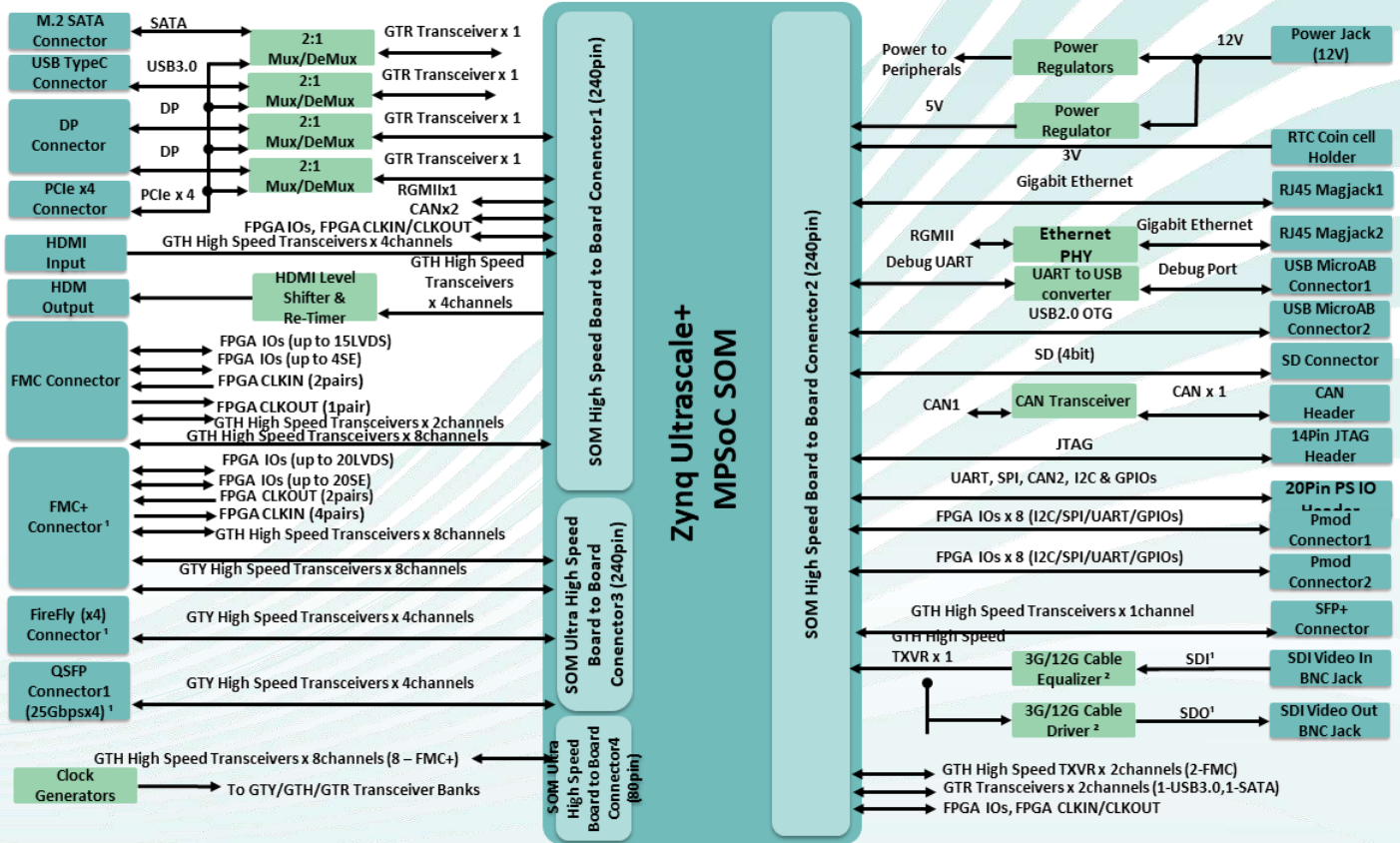
SDI Video IN/OUT

Dual 1G Ethernet

SPECIFICATIONS

Zynq Ultrascale+ MPSoC SOM:	GPIOHeaderx1
Zynq Ultrascale+(ZCU19EG) MPSoC(-1 speed) @ 1200MHz	RTC Holder x1
PMIC with RTC	JTAG Connector x1
8GB eMMC Flash (for boot code)	PL - Interface
4GB DDR4 RAM for PS	Pmod Connector x2
4GB Dual DDR4 RAM for PL	SFP+ Connector x1
PS-GTR Transceivers x4 @ 6Gbps	QSFP+ Connector x1
PL-GTH Transceivers x32 @ 16.3Gbps	SDI Video IN Connector x1
PL-GTY Transceivers x16 @ 32.735Gbps	SDI Video OUT Connector x1
Gigabit Ethernet PHY	HDMI IN Connector x1
USB2.0 Transceiver	HDMI OUT Connector x1
Ultra-High-Performance Carrier Board:	FMC+ Connector x1
PS - Interface	FMC Connector x1
10/100/1000 Ethernet x2	FireFly Connector x1
CAN Header x1	Power Supply
Debug Console x1	4-Pin DIN Power Connector (12V) x1
SD Connector x1	Switches
USB2.0 OTG Connector x1	Reset Button x1
M.2 SATA Connector x1	Power ON/OFF Switch x1
DP Connector x1	PS-GTR Lane Selection Switch x1
USB-Type-C Connector x1	Operating System
PCIe4 Connector x1	Linux

ZU19/17/11 Zynq Ultrascale+ MPSoC Development Kit– BLOCK DIAGRAM



Note:

¹ These interfaces can be used only with ZU11/17/19EG based SOM

² By default, 3G SDI IN/OUT is supported. Optionally, 12G SDI IN/OUT can be supported on request.

OS SUPPORT

Linux 4.41.0

DELIVERABLES

Zynq Ultrascale+ MPSoC Development kit
Linux 4.14.0 BSP
12V AC-DC Adapter
HW/SW user manuals
Quick Start Guide

Optional KITS/Modules

Pmod Modules

CUSTOM DEVELOPMENT

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

iWave Systems Technologies, established in 1999 focuses on Product Engineering Services involving Embedded Hardware, Software & FPGA. The Company designs and develops cutting edge products and solutions. iWave has been innovator in development of highly integrated, high performance, low power and low cost System On Modules and Development Platforms. iWave's expertise brought out multiple SOMs based on ARM, NXP, Intel Atom, Marvell and TI Processors.

iWave Systems has won the confidence of its customers over the years by being a reliable partner in developing innovative products. Our engineers combine outstanding system design experience to deliver Quality Solutions. iWave specializes across Industrial, Automotive and Medical domains. We support our customers by being time efficient, which in turn helps our customers accelerate time to market their products. iWave is windows embedded Silver Partner and winner of the Partner Excellence Award.

*Optional items not included in 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.

Zynq Ultrascale+ MPSoC Development Kit

The device can be ordered online from the iWave website
<http://www.iwavesystems.com/webforms>

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