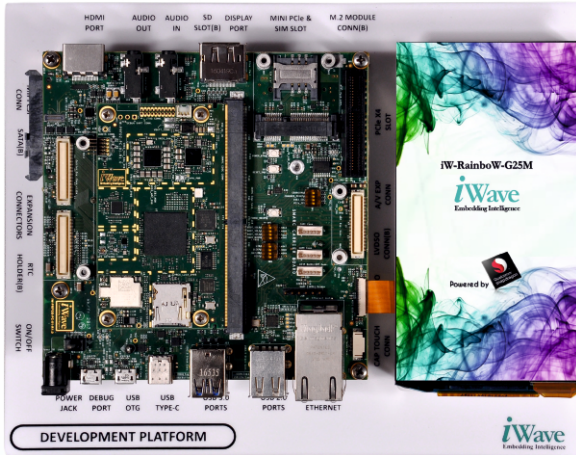


Development Platform iW-RainboW-G25D Snapdragon 820 Development Kit



The Snapdragon 820 SMARC Development Board incorporates SD820 APQ8096 SMARC SOM which is based on Qualcomm APQ8096 SOC targeted for powering next-generation devices offering many advantages including superior performance, low power consumption, and integrated connectivity. This platform can be used for quick prototyping of any high end applications in verticals like Automotive, Industrial & Medical. The board is highly packed with all necessary onboard connectors to validate complete Snapdragon 820 features.

APPLICATIONS: Augmented & Virtual Reality, 4K Digital Signage, Media streaming, Connected home & entertainment, High end wearables, Drones, Secure POS, Video analytics.

iW-RainboW-G25D HIGHLIGHTS

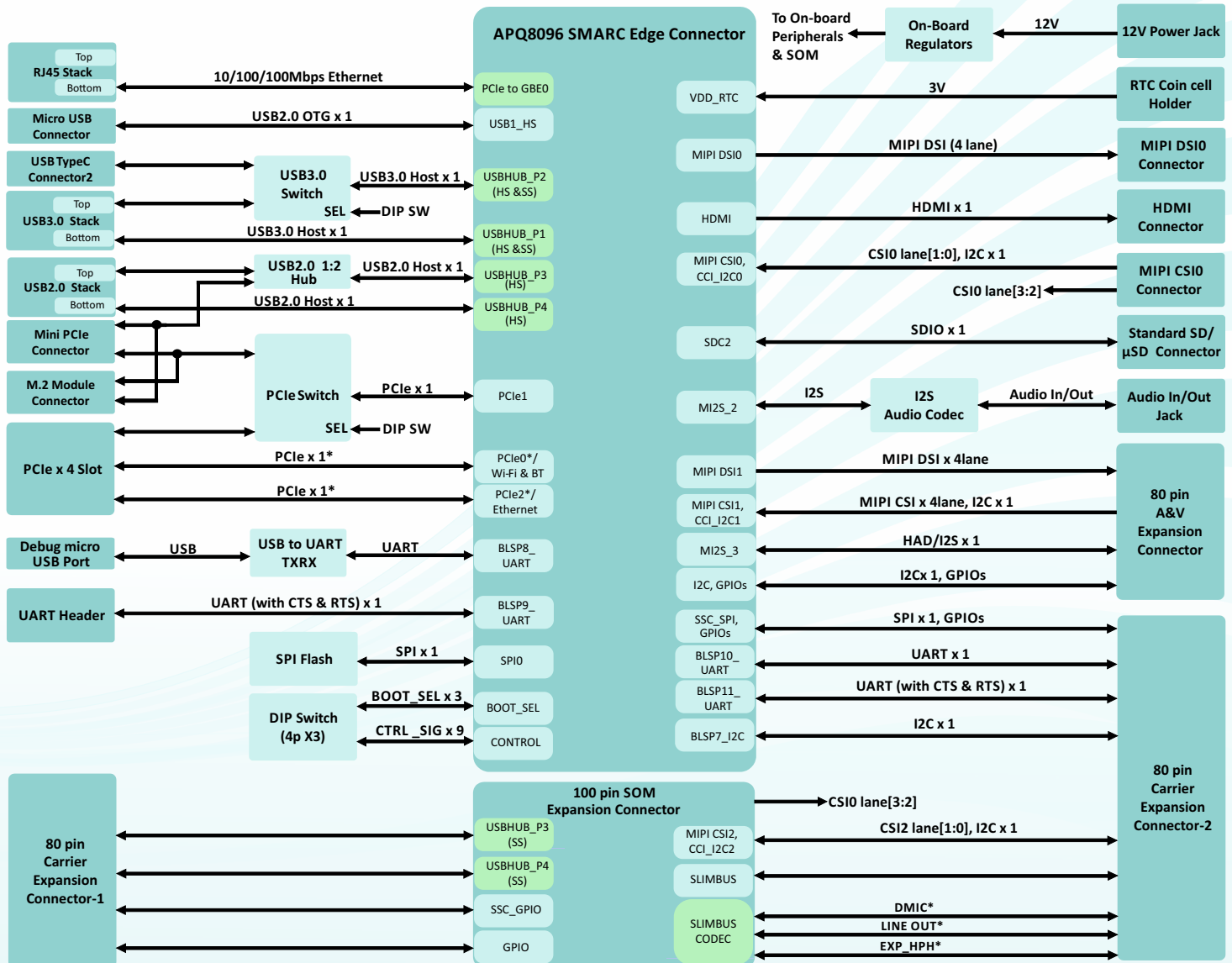
64-bit Quad Kryo Snapdragon 820 CPU
Adreno 530 3D Graphics @624MHz
Hexagon 680 DSP @ 825MHz
H.265 4K60 decode, 4K30 encode
802.11ac Wi-Fi, BT 4.1 and GPS
5.5" HD AMOLED Display with CAP touch
SMARC R2.0 compatible

SPECIFICATIONS

APQ8096 SMARC SOM:	
SD820 64-Bit Quad Kryo CPU (Without Modem)	Standard SD slot - 1 Port
3GB LPDDR4 RAM	HDMI Connector
32GB eMMC Flash	5.5" HD AMOLED MIPI DSI display
Micro SD slot	Capacitive Touch screen
PCIe to Gigabit Ethernet + PHY	8MP MIPI CSI Camera Connector
802.11a/b/g/n/ac Wi-Fi + BT4.1 Low Energy (BLE)	Full Function UART - 1 Port
GPS/GNSS receiver	RTC with backup battery
SMARC Carrier Board:	
Gigabit Ethernet Jack - 1 Port	Debug MicroUSB Port
PCIex1 slot/MiniPCle Slot - 1 Port ^{1,2}	IO Expansion connectors
USB 3.0 Host TypeA Connector - 2 Ports	Power Input: 12V DC
USB 2.0 Host TypeA Connector - 2 Ports	OS: Android Marshmallow
USB 2.0 OTG MicroB Connector - 1 Port	Operating Temperature: 0°C to +70°C
	Form Factor:
	120mmx120mm Nano ITX Size

Note1: PCIe interface to PCIe1 slot or MiniPCle is selectable through control switch.
Note2: USB 2.0 Host interface also available on MiniPCle slot

SMARC Development Board - Block Diagram



*Optional items not included in the standard deliverables

OS SUPPORT

Android Marshmallow

DELIVERABLES

SD820 SMARC Development Kit
Hardware User Manuals

OPTIONAL KITS/Modules

5.5" HD Display with CAP touch
Camera 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 an innovator in the development of highly integrated, high performance, low power and low cost System On Modules and Development Platforms. iWave's expertise has brought out multiple SOMs based on ARM NXP, Intel Atom, Marvell and TI Processors.

iWave System 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 a Windows embedded Silver partner and a winner of the Partner Excellence Award.

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.

Ordering the Snapdragon 820 Kit

The Development Kit can be ordered online from the iWave Website
<http://www.iwavesystems.com/webforms>

iWave Systems Tech. Pvt. Ltd.,

7/B, 29th Main, BTM Layout 2nd Stage,
Bangalore-560076, India.
Ph: +91-80-26683700, 26786245
Email: mktg@iwavesystems.com
www.iwavesystems.com

iWave Japan, Inc.

8F-B, Kannai Sumiyoshi Building,
3-29, Sumiyoshi-cho, Naka-ku,
Yokohama, Kanagawa, Japan.
Ph: +81-45-227-7626
Email: info@iwavejapan.co.jp
www.iwavejapan.co.jp

iWave Europe

Postbus 6197
3130 DD Vlaardingen
The Netherlands
Ph: +31 10 28403383
Email: info@iwavesystems.eu