# ENHANCING ACCESS TO EMBEDDED WORLD



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### **Short Snippet Of Our Latest Offerings**

- i.MX8M Mini / Nano uQ7 SOM powering Artificial Intelligence Gateways
- Corazon-Al, EdgeAl Gateway integrated with 8 parallel IP Cameras
- Launch of iWave Embedded security to complement our embedded solutions
- Launch of the Industrial Grade INTEL ARRIA 10GX System on Module
- Telematics Gateway and Control Unit powering the automotive data
- Linux 5.4 kernel availability on i.MX8QM SMARC and SBC
- Enabling 4K Ultra HD Capabilities through ZynQ UltraScale+ MPSoC Platform

Launch of the i.MX8M Mini / Nano uQ7 SOM as an embedded block powering space constrained and portable Artificial Intelligence Gateways and Industrial modules



Extending the portfolio of i.MX8 System on Modules, the i.MX8M Mini / Nano Micro Q7 Module with a compact form factor of 70mm \* 40mm while powered with 4 \* Cortex - A53 Cores and 1 \* Cortex M4F Core is an ideal solution for space constrained solutions .

The Micro Q7 System on Module with on-board Wi-Fi & BLE 5.0 Connectivity along with various interfaces (Ethernet / PCIe / USB 2.0 OTG and Host / HDMI and MIPI Connector) & LINUX and Android BSP powers innovation & drastically reduces time to market for organisations across sectors.

## Corazon-AI, The ZYNQ UltraScale MPSoC powered EdgeAI Gateway is now tested with 8 IP Cameras simultaneously with each running different models

Through Corazon-AI, we present an efficient Multi-Channel - AI Video Analytics gateway. Through the design of an 8-channel Xilinx Video Codec Unit (VCU) + CNN inference deployed on Corazon-AI the gateway serves as a low-power heterogeneous compute platform enabling edge computing.

Video data from eight RTSP streams from the 8 Cameras is processed alongside high-speed deep Learning analytics performed on each video stream at the edge on Corazon-AI. The video presents the performance and capability of the Video Codec Unit as an Hard IP Block and the AI Inference Engine.



#### **Embedded Security Suite to strengthen our embedded solutions**



iWave's security suite provides the end to end security and prevent the information/data in the system from being unauthorized. Minimizing the security risks can be done by using iWave's security suite during the development and also in the later stages.

## The launch of the Industrial Grade INTEL ARRIA 10 GX System on Module with 24 Transceiver Lanes up-to 17.4 Gbps

The Industrial Grade INTEL ARRIA 10 GX Series of System on Module is integrated with an FPGA Core of up to 1150 Logic elements, dual DDR 4 Support and a wide range of high speed I/O and interface options.

With 500MHz logic core performance, the GX models support 24 high speed transceiver lanes upto 17.4 Gbps. The system on Module provides access to all features of the ARRIA 10 GX Core (Ethernet/ USB OTG / LVDS and single Ended I/Os) positing itself as a good fit for medical imaging, RADAR, Test & Measurement applications & wireless infrastructure equipment).



#### Automotive Data has now become more profitable than the car itself



Telematic Solutions are driving the connected vehicle revolution. Data from vehicles are now driving a wide range of consumer applications: Automotive Retail, Fleet Management, Predictive Maintenance, Geo-fencing and the list continues to grow by the day.

To enable data for such types of applications, telematic solutions need to be modular and provide the flexibility to be able to communicate through different CAN Interfaces and varying protocols. CAN Interfaces ranging from CAN FD, HS CAN, LS CAN and Ethernet CAN are now required due to varying standards and protocols across manufacturers in the automotive industry.

#### Linux 5.4 kernel availability for i.MX8QM SMARC and SBC

Yocto BSP is available for our Rainbow-G27 i.MX8QM SMARC and SBC based on i.MX8QM/QP processors. This BSP has iWave's latest 5.4.24 Kernel and 3.0 Zeus Yocto project version, which brings additional advantages, including better-accelerated machine learning and performance optimizations on iWave's i.MX8 products.





iWave presents the Zynq® Ultrascale+™ development platform with the capabilities to implement HDMI 2.0 standard that meets the industry demand. Integrated with excellent features and functionalities geared for various multimedia and live streaming applications.

The board features ARM® + Xilinx FPGA architecture delivering an extensive set of peripherals presenting customers with a platform to accelerate their innovations.









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