

QMAX*SYSTEMS*

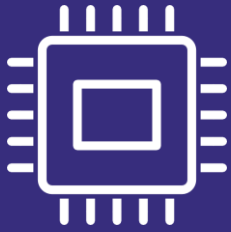
Electronics Engineering Services

Qmax Introduction

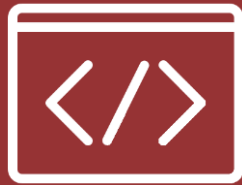
- An Electronics Engineering and R&D Services company
- End to End Product Development Services
- R&D Team in Chennai, India, Sales office in the USA
- Multi Domain Expertise – Automotive / Aerospace /
Industrial / Medical / Defence
- Incorporated in 2000



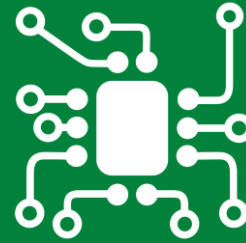
Services Offered



Hardware
Design



Embedded
Firmware



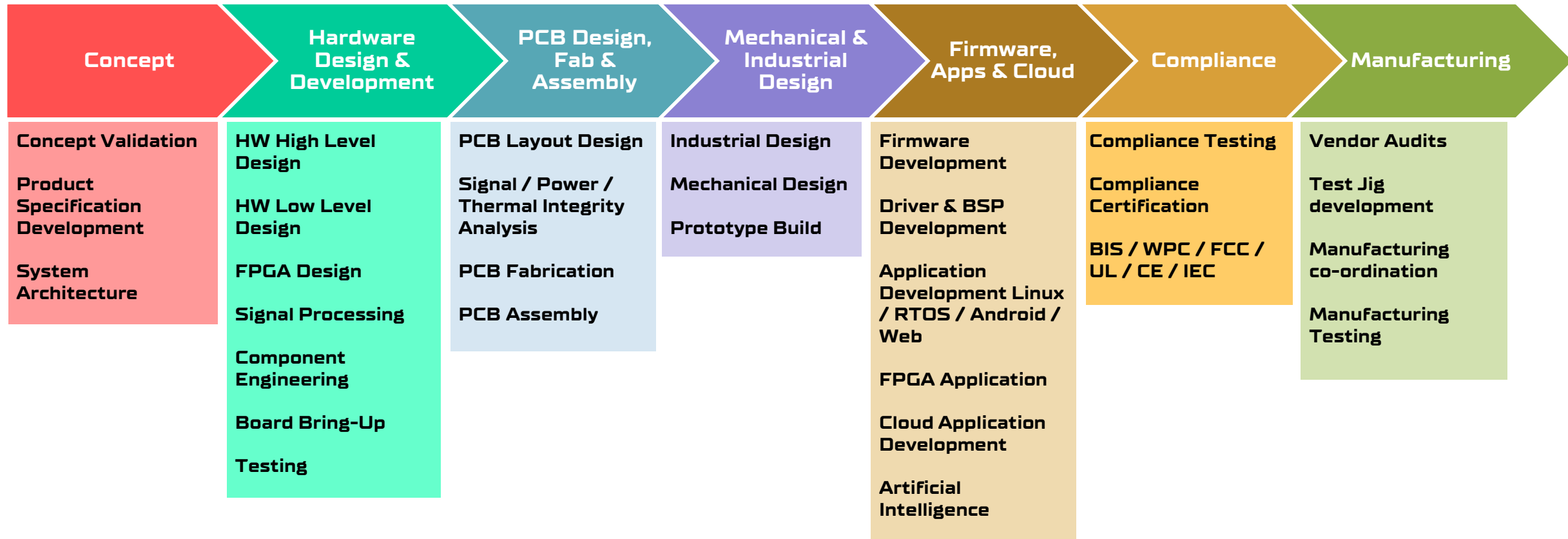
PCB
Design



Mechanical
& Industrial
Design

Design to Manufacturing – One Stop Shop.!

← End to End Product Development Services →



Quality Assurance



CERTIFICATE

OF REGISTRATION

This is to certify that the Management System of

Qmax Systems India Pvt Ltd
310-2A, Rukmani Nagar, 4th Street, Poonamallee, Chennai -600056,
Tamil Nadu, India.

has been assessed and registered by Veritas System Quality
Certificates as conforming to the requirements of

ISO 9001:2015
Quality Management System

The Quality Management System is applicable to:

**To Provide Electronics Design, Embedded Systems Development,
Production & Engineering services as per customer requirements
across Industries.**

IAF/EA-NACE Code: 19-26.12

Certificate No : VSQC099-42100115 - R1

Initial Certificate Date : 23-07-2022
Re-certification due date: 22-07-2025



From responsible member
FSC® C118414

Issue No: 01

This certificate remains valid while the holder maintains the management system in accordance with the standard(s) above,
which will be periodically audited by Veritas System Quality Certificates Issuing LLC.

This certificate remains the property of Veritas System Quality Certificates Issuing LLC and must be returned on request. In the issuance of this
certificate, Veritas System Quality Certificates Issuing LLC no liability to any party other than to the client, and then only in accordance with the
agreed upon certification agreement. Validity of this certificate may be confirmed at www.veritasassurance.com, directly through QR
code by using any device with correct information or email to admin@veritasassurance.com.





CERTIFICATE

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Qmax Systems India Pvt. Ltd.
No.310/2A, Rukmani Nagar, 4th Street, Poonamallee,
Chennai - 600056, Tamil Nadu, India.

has been assessed and registered by Lexus Certifications Intl
as conforming to the requirements of

ISO 13485:2015
Medical Devices Quality Management System

The Medical Devices Quality Management System is applicable to:

**Design, Development and Manufacturing of Medical Electronic Products
such as Respiratory Monitoring Systems, Smart Phone Dental Cameras
and Photo-plethysmograms (PPG)**

Certificate No : LXCI-771286

Initial Certificate Date : 08-11-2025
Certificate expiry date: 07-11-2028
Surveillance 1 due date: 07-11-2026
Surveillance 2 due date: 07-11-2027

Note: Validity of this certificate is subject to successful completion of each annual surveillance audit
on or before due date. In case surveillance audit is not conducted then this certificate
shall be suspended/cancelled.

Accredited Board:
Accred Services International Board (Europe) Limited (ASIB)
128 City Road, London, United Kingdom, EC1V 2NX.



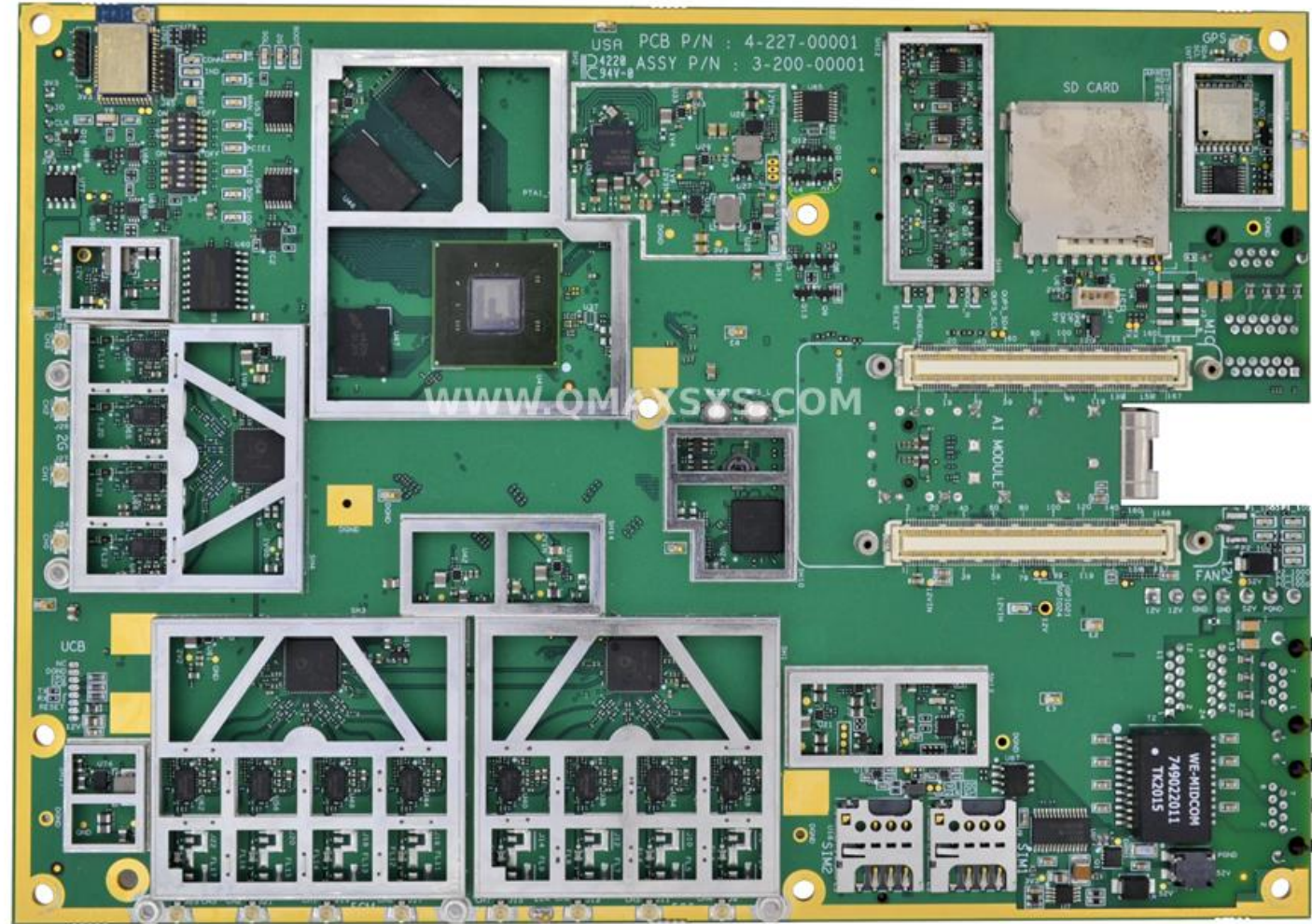
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any party other than to the client, and then only in accordance with the agreed upon certification agreement. Validity of this certificate may be confirmed at
www.lexuscertifications.com or email to admin@lexuscertifications.com.

Product Design Case Studies

11ax Wireless AP - HW Spec

- Qualcomm IPQ8078A SoC
- 8x8 on 5Ghz and 4x4 on 2.4GHz
- MU - MIMO / BLE / SFP+ / GigE
- LTE / GPS / POE / USB / PCIe
- Thermal / SI / PI Analysis
- High Density BGA Packages



Aerospace Structural Health Monitoring System

- AI enabled Air Frame Structural Analysis
- Altera A10 FPGA
- Digital Signal processing
- Low Power, Light Weight, Compact Design
- Complete HW / FPGA / Enclosure design
- Ultra-Low Noise / SNR of 50dB
- High Speed ADCs / DACs / Sync – E / HV Mux



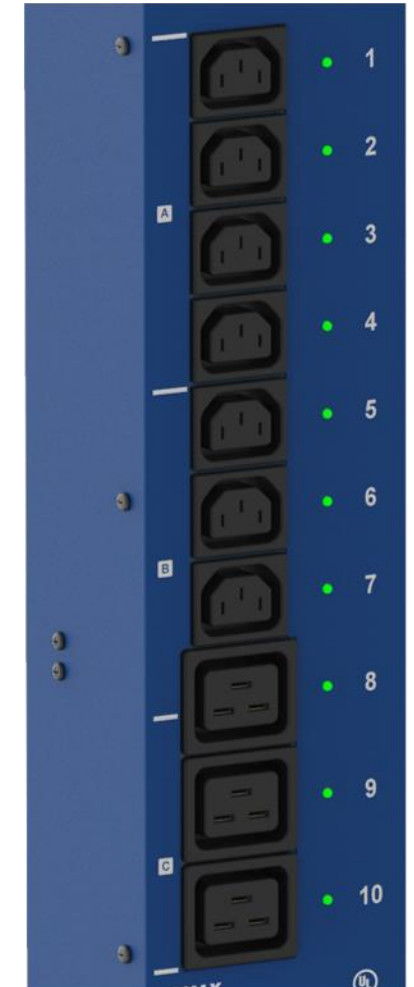
Rugged RF Power Supply

- Plasma Generation Application
- NXP i.MX6UL CPU
- NXP MRFE6VP61K25HR6 Rugged RF Power LDMOS Transistors
- Frequency: 13.56 MHz
- Rated Power: 1kW
- RJ45 / DB25 Communication Ports
- Customized RF Design
- Full Product Development and Delivery



Intelligent PDU

- UL Certified 3 Phase Power Distribution Unit
- Power Rating: 45 kW / 415VAC 63A Per phase
- 30 Outputs – C13 & C19 Sockets
- Individually Monitored and Controlled Outlets
- High Accuracy Energy and Parameter Monitoring
- Communication Protocol: SNMP
- ARM Cortex-A7 Microprocessor - Dual Ethernet



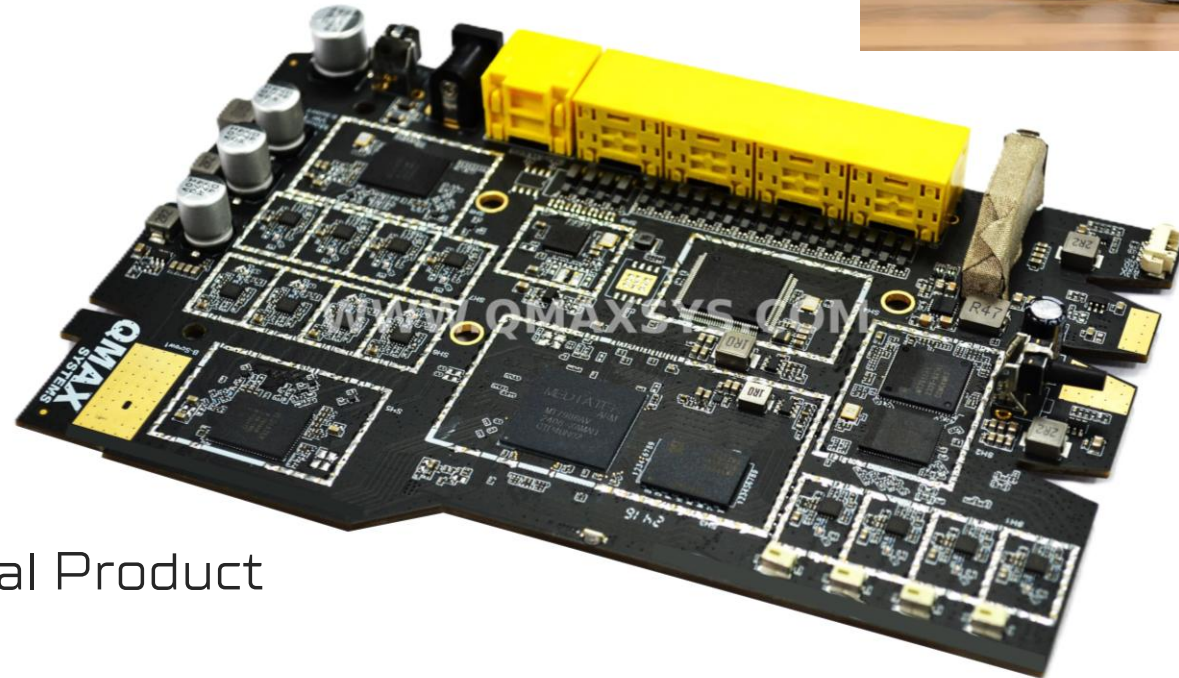
Connected On-board Diagnostic Device

- Full Product Development - HW / FW / PCB / ID
- ARM Cortex A7 CPU / 1 Gb DDR3 / 4Gb eMMC
- Linux / Over the Air Firmware update (OTAP)
- Wi-Fi / BLE 4.1 / LTE-M / GPS / LCD Display
- Native CAN / Ethernet / USB 2.0
- Accelerometer / Magnetometer / LEDS
- 2000mAh Battery / Wireless Charging
- IP 65 Rated ABS Enclosure
- Deployed in GM Garages across USA



Cybersecurity Device

- MediaTek MT7986AV - Wi-Fi 6/6E Router SoC
- Tri-band Wi-Fi: 4x4 -2.4GHz + 4x4 5GHz + 4x4 5.8GHz
- MU – MIMO / BLE / DDR4 / GigE Ports / USB 3.0
- Full RTOS and Cybersecurity Application Build
- Full Product Development
- Thermal / SI / PI Analysis
- RF Tuning / RF Calibration
- Prototyping and Testing
- FCC Certification
- Volume Production - Commercial Product



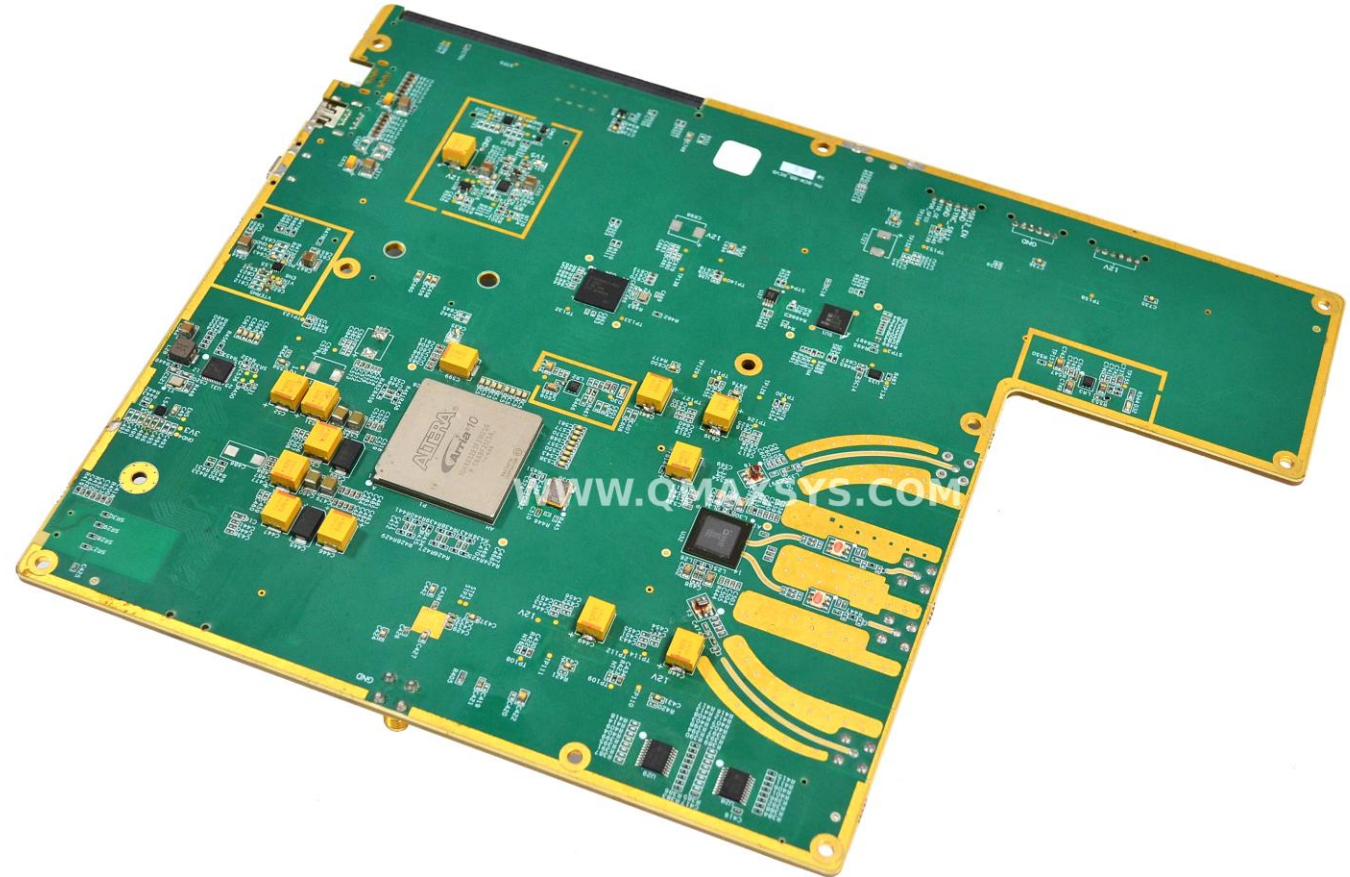
Digital Signage with HDMI Input

- Full Product Development - HW / FW / PCB / ID
- Rockchip 3568 Chipset / HDMI Input – HDCP compliant
- POE / 4K HDMI Output / 0.96" OLED Display
- Wi-Fi / Bluetooth / Gigabit Ethernet / USB 2.0 / 3.0
- 4GB DDR4 RAM / 16GB eMMC / / RTC / GPIOs
- Audio OUT / Status LED / IR Remote / IR Extender
- Driver Development
- Full AOSP Build



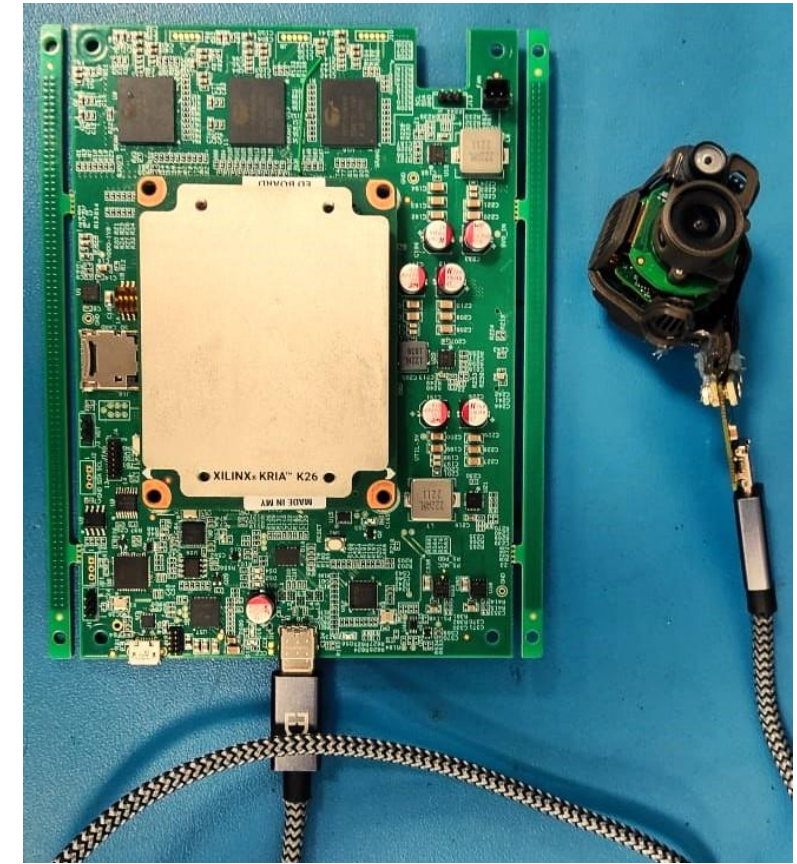
High Speed Analog / RF Board Design

- Arria 10 FPGA
- Software Defined Radio Application
- RF Transceiver : AD9xxx
- 16-bit ADC
- Rx BW: 8 MHz to 100 MHz
- Digital Interface with FPGA (Speed up to 6.4Ghz)
- Dual RX and TX with ORX
- PCIe / Ethernet

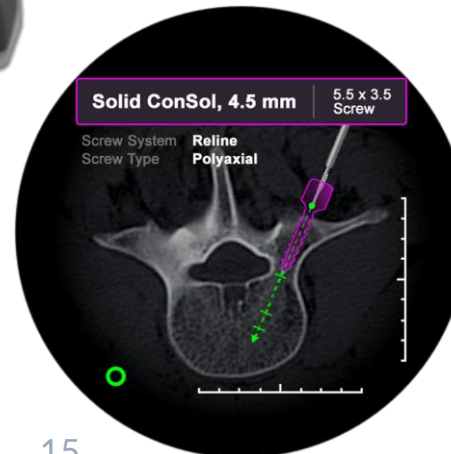


Mixed Reality / Image Processing

- Zynq® UltraScale+ FPGA
- Medical mixed reality application
- Image Processing Application
- HW Design / FW Development / FPGA SW



Hip Pack Board With
Camera Module

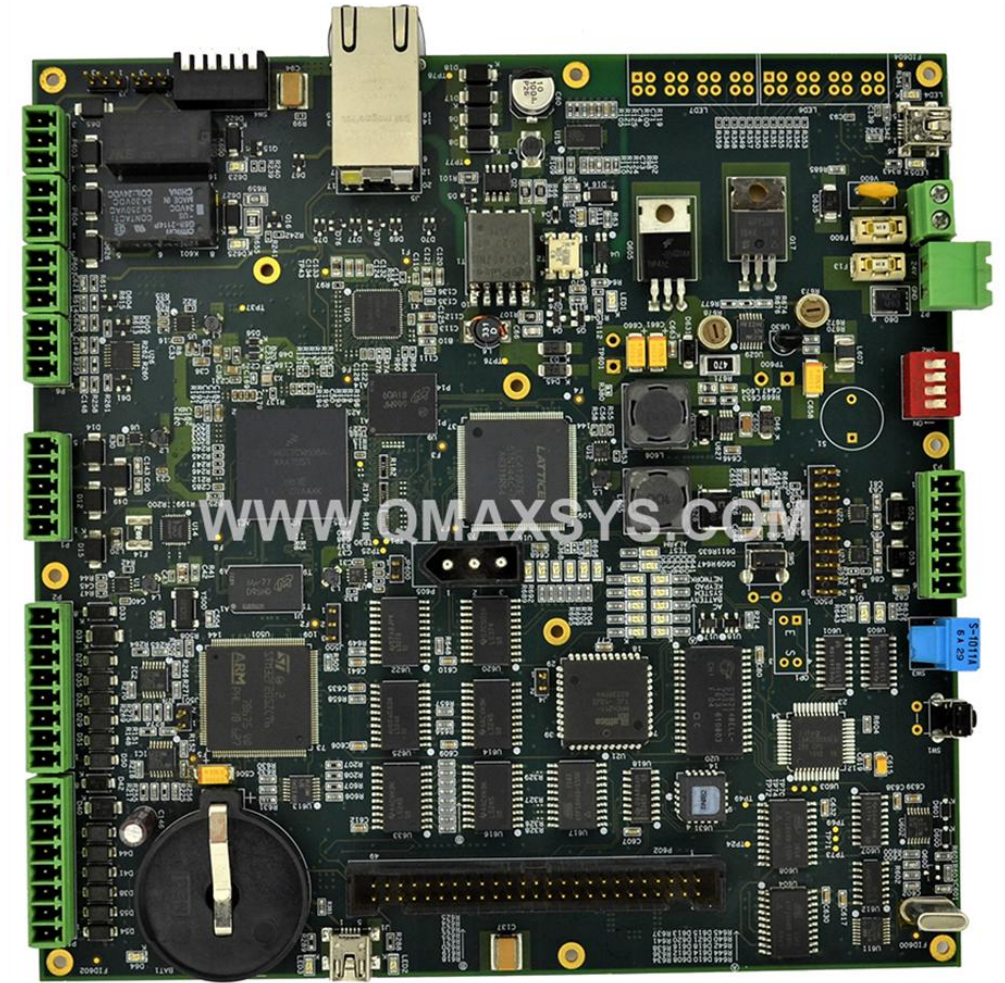


Security System Controller

- Hardware / Firmware design and Development
- IMx6 CPU / STM32 ARM Cortex-M Controller
- Linux / RTOS / Ethernet / DIO / AIO / PoE
- Mechanical / Enclosure Design / DFM
- FCC Class B certified
- BGA ICs / Local Assembly



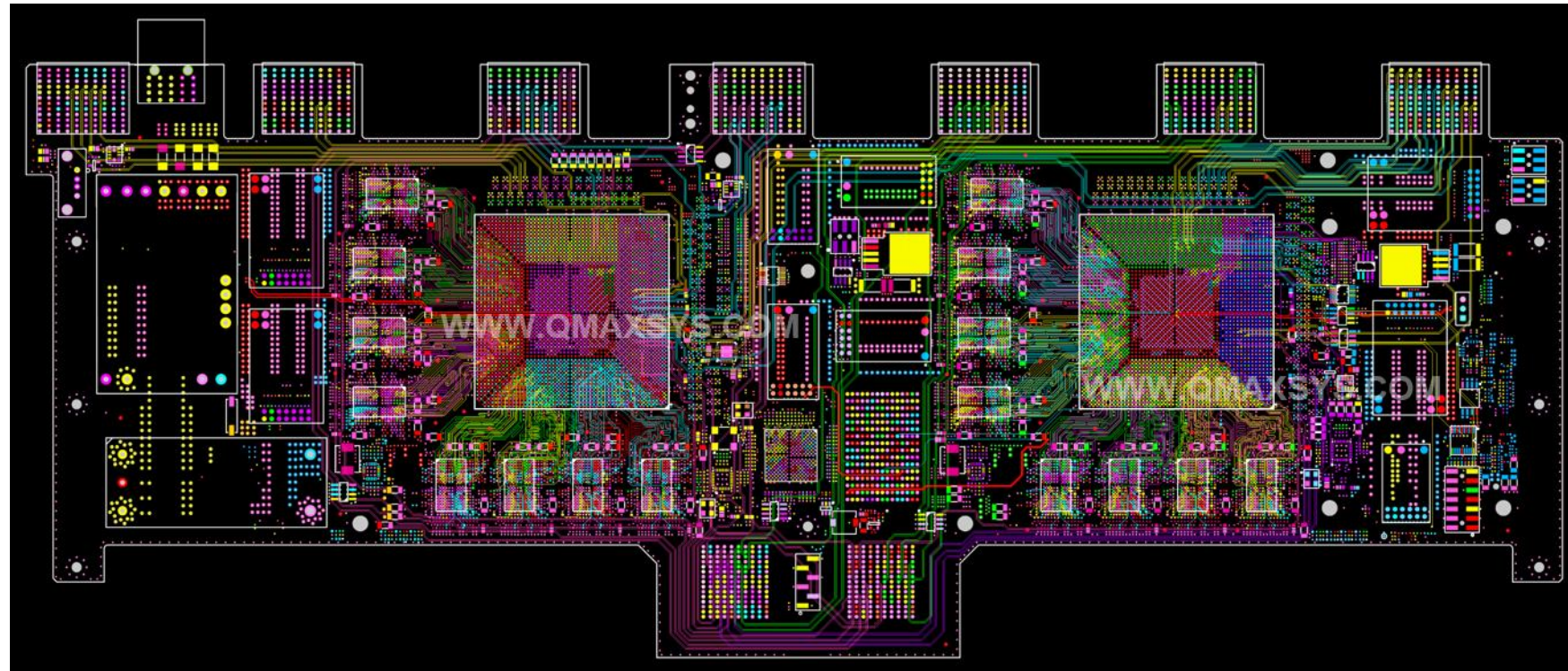
Stackable Design



PCB Design Case Studies

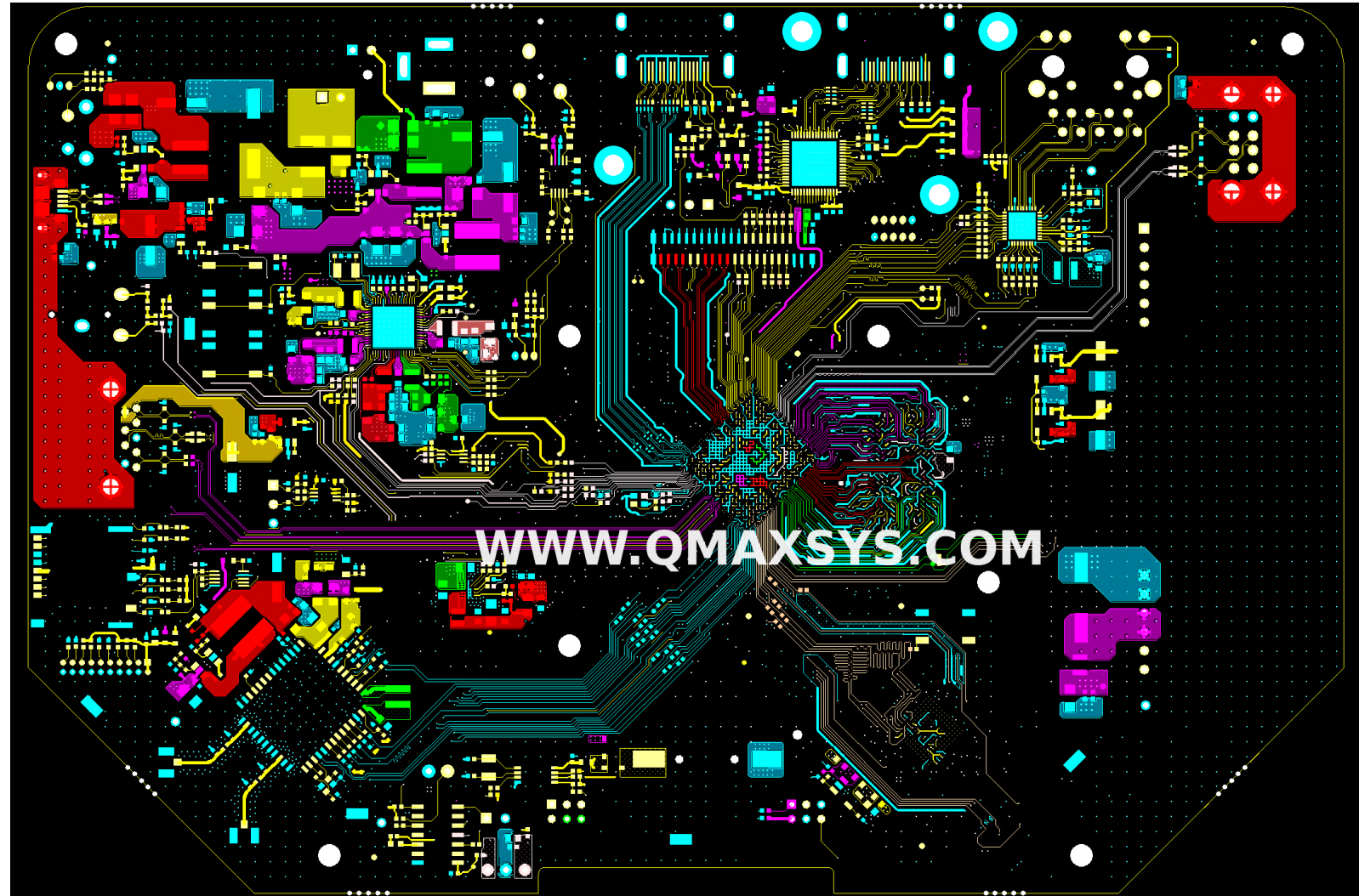
Networking Board

- 100 GBE Switch/Router Board / High speed / DDR3
- 36 layers / 2597 Pins BGAs
- 19705 pins
- Chipset: BCM88650
- High Current
- Ultrahigh density
- Cadence Allegro 16.5



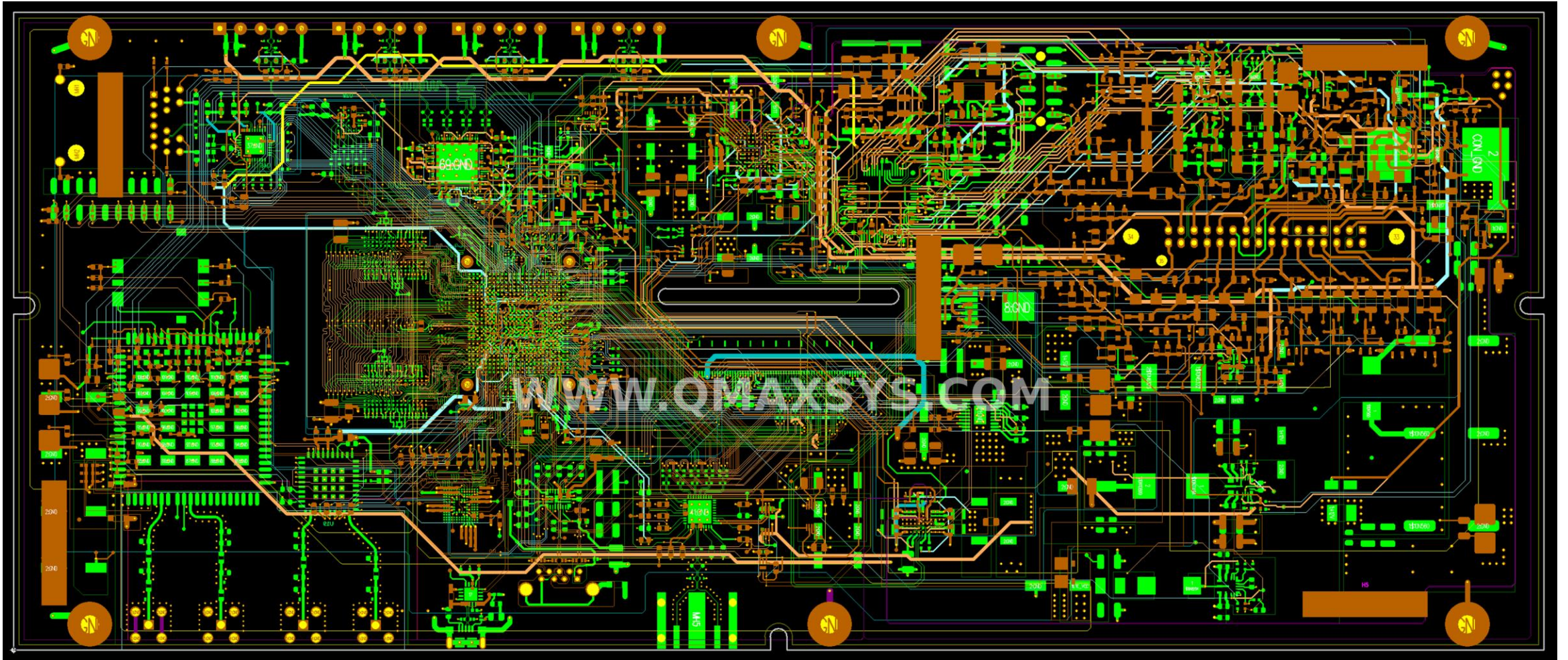
Media Player Board

- Media Player Application
- 6 Layer PCB
- Rockchip Processor
- HDMI
- DDR4
- eMMC
- POE



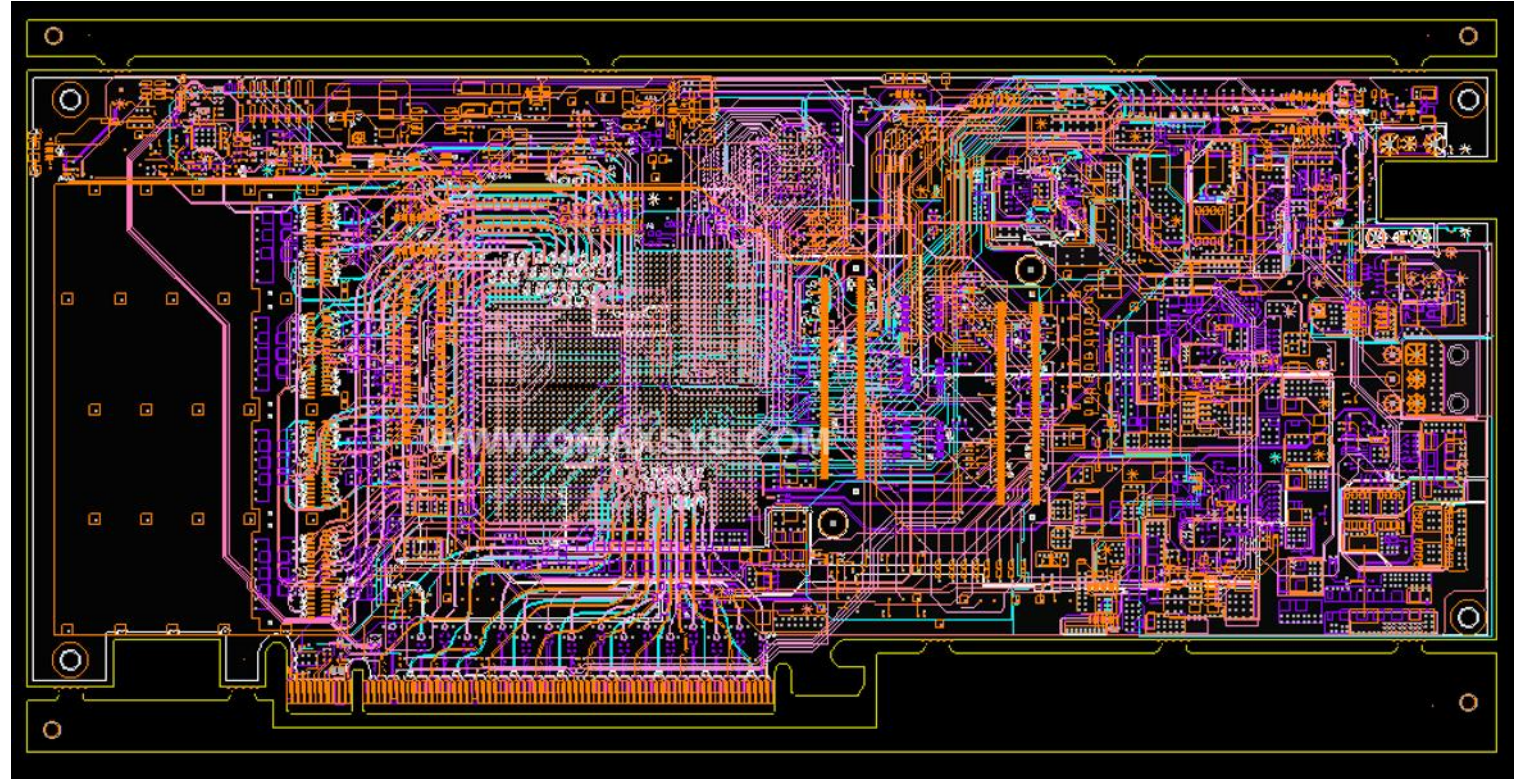
Automotive Infotainment Board

- iMX8xx / HW Design / PCB Design / SI & PI Analysis

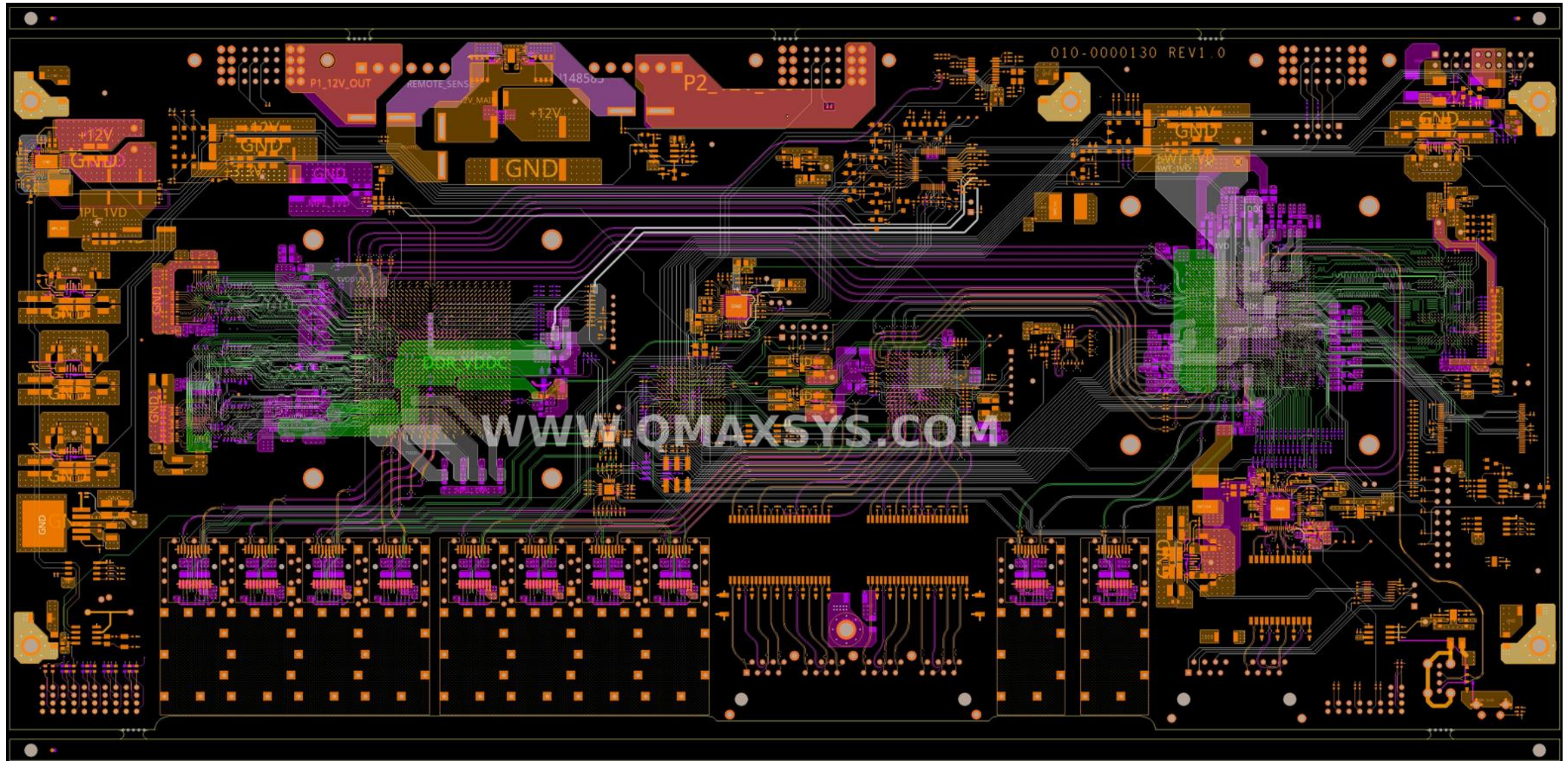


FPGA based 4 x 100G Interface Card

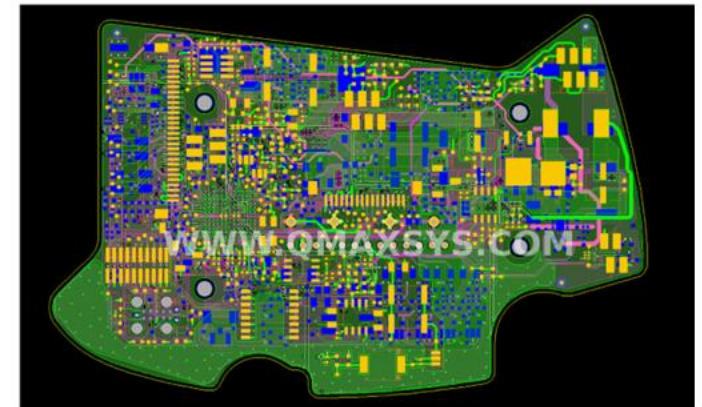
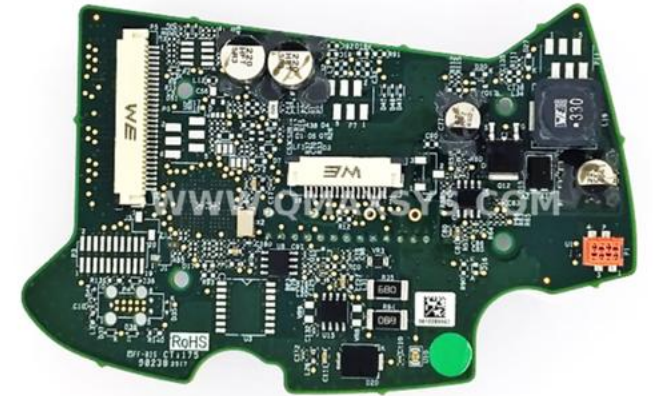
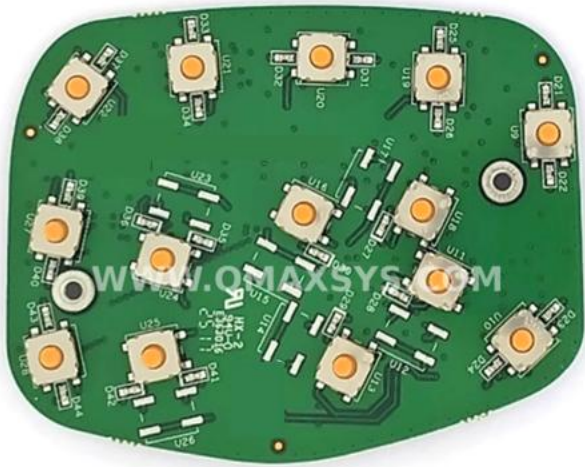
- Virtex® UltraScale+ FPGA
- Networking Application
- PCIe Gen 5 to QSFP+ x 4
- 1mm Pitch 2104 pin BGA
- High Density
- High Speed
- 16 Layer PCB
- HDI PCB



Networking Board - GPON



Automotive PCBs



Industrial Design Case Studies

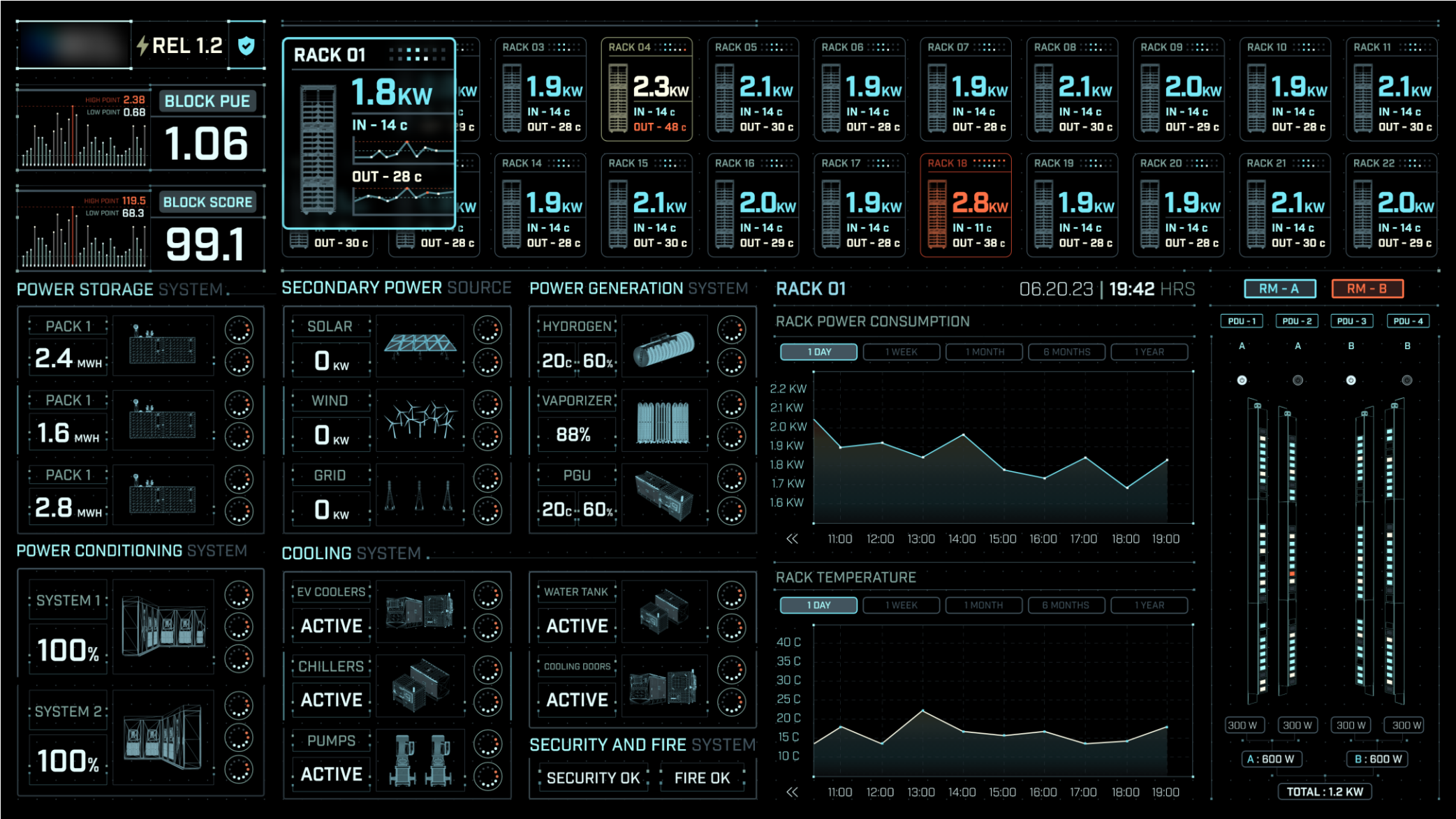
Case Studies



Case Studies



Dashboard Design Case Study



Thanks.!

Saravana

Founder and CEO

+1 412 265 2314

+91 98402 30903

Qmax Systems India Pvt. Ltd.

310/2A, Rukmani Nagar, 4th Street,

Poonamallee, Chennai 600056,

Tamil Nadu, India

Qmax Systems LLC.

539 W Commerce St # 7953

Dallas, TX 75208 - 1953

United States

saravana@qmaxsys.com

www.qmaxsys.com