

AEG OVERVIEW

John Parker 2025



Engineering Tomorrow's Ideas

FUTURE ELECTRONICS OVERVIEW

Our Mission

Delighting Customers Worldwide™

by providing the industry's highest

level

of service and a differentiated value

proposition to our customers every



Founded in 1968

Delighting customers worldwide for over **50** years.



5500+ employees, world-wide

1000+ marketers spread across **45** countries, **170** locations.
Worldwide HQ in Montreal, Canada.
Regional hubs in Singapore, Shanghai and London



Single global IT

CRM proprietary platforms



Leaders in global supply chain solutions with truly bonded inventory

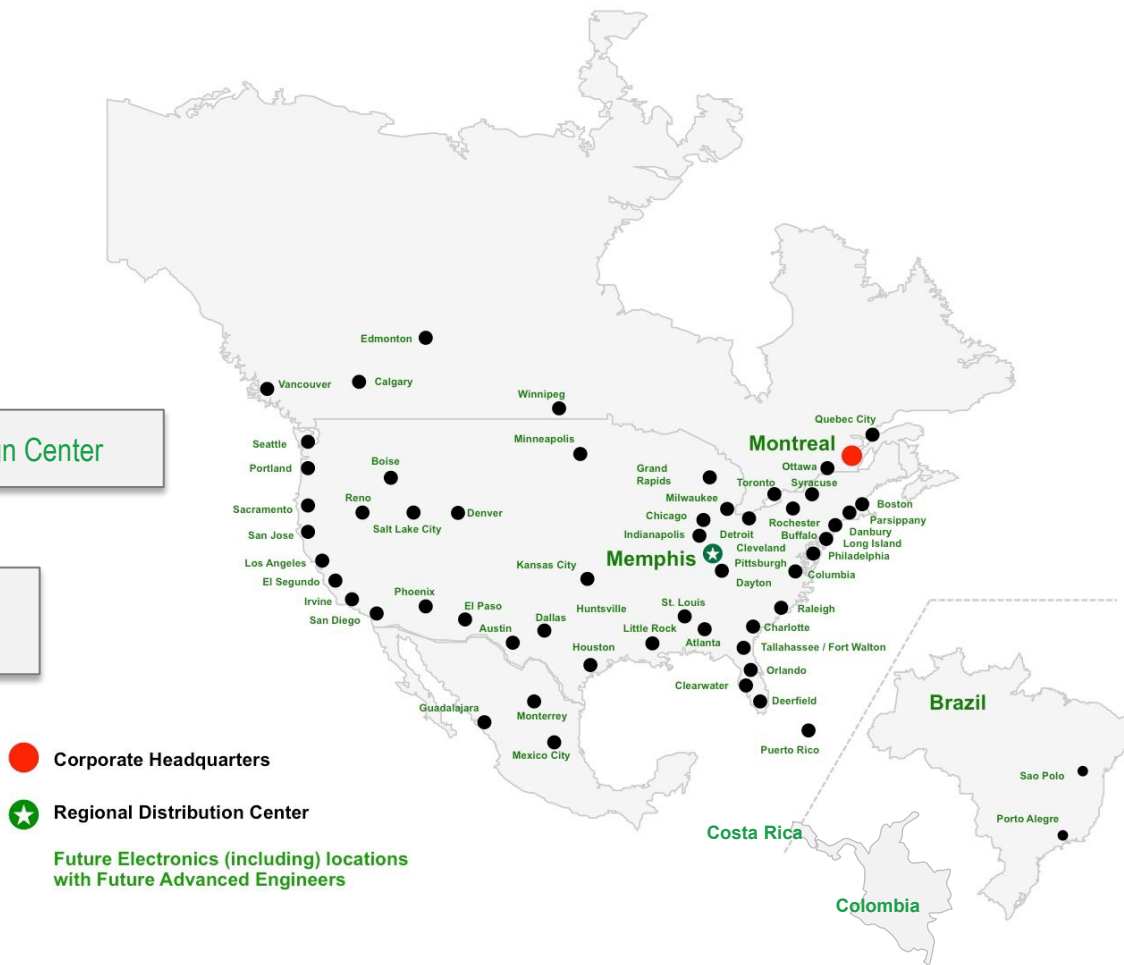
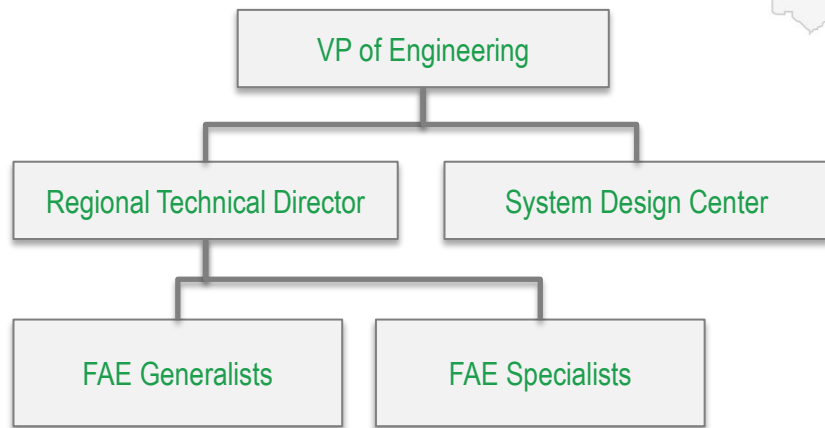
Inventory-driven, providing **99.5%** OTD, continuity of supply and supply chain flexibility



WT MICROELECTRONICS

April 2, 2024: “WT Microelectronics and Future Electronics are now joining forces in creating a global electronic components distribution powerhouse, dual-headquartered in Taipei and Montreal that will deliver long-term, sustainable value to all stakeholders. This acquisition represents a transformational milestone, as it brings together two highly complementary business models and solidifies WT Microelectronics’ position as a global electronics distributor with end-to-end service capabilities by leveraging the strengths and expertise of both organizations to offer even greater value to customers and suppliers.”

Americas



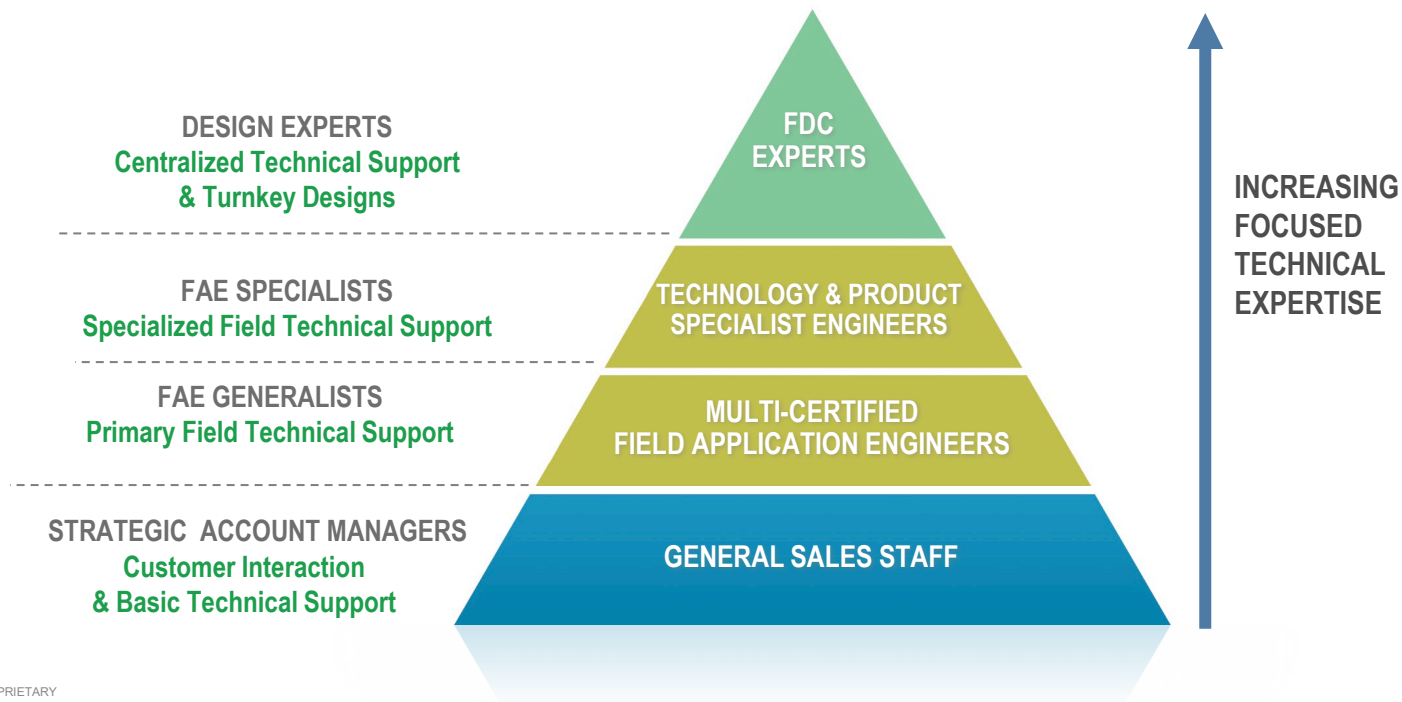
FUTURE TEAM FOR CENTRAL

Local Team	Portfolio	Contact
Strategic Account Manager	Primary Contact	Cole Swaggart or Randy Sharp
Applications Engineer	ALL Technologies	John Parker

Specialist Team	Portfolio	Contact
Future Intelligent Solutions	Regional Sales Manager FPGA MPU, SoM Ethernet, PCIe	Ed Baca Tony Moore Ayman Sydhom Michael Leung
Future Connectivity Solutions	Regional Sales Manager Sensors Wireless Connectivity	Allen Cabrerros John Stih Bill Munger
Future Analog Solutions	Analog and Power	Dawn Zuidema
Future Display Solutions	LCD, OLED Display Panels	Adam Larkin
Interconnect Business Development Manager	Connectors and Cables	Tim Minea

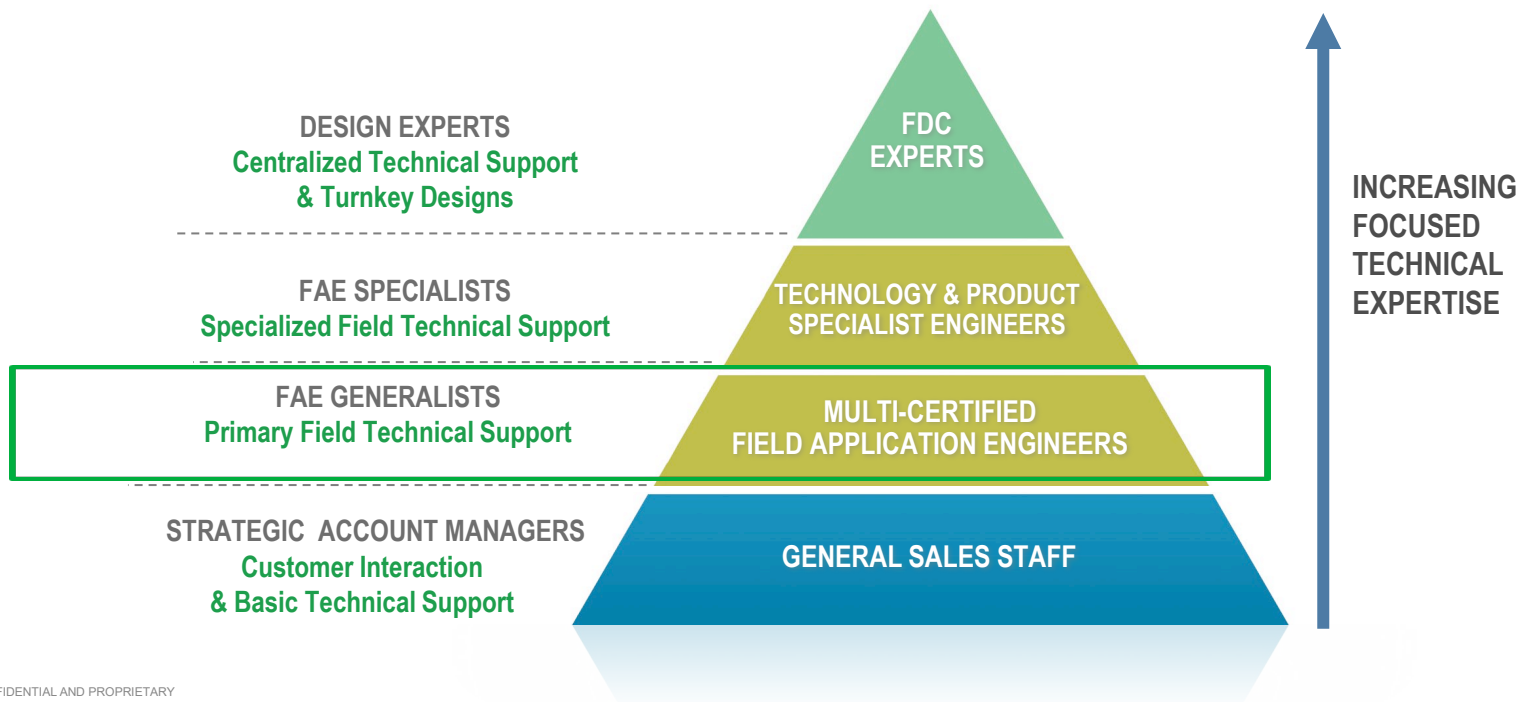
ENGINEERING GROUP

CUSTOMER SUPPORT MODEL



ENGINEERING GROUP

CUSTOMER SUPPORT MODEL



Advanced Engineers Generalists

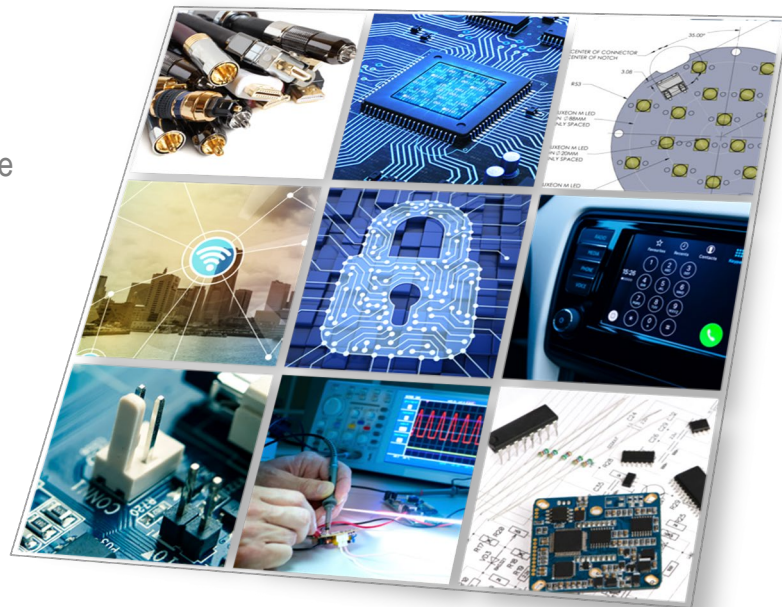
First Level of Support

Core Competencies of all our Engineers

- True technology experts who understand specific design complexities and are dedicated to overcoming them
- Suppliers agnostic to present unbiased systems solutions
- Receive extensive hands on training from all our suppliers to understand existing and future products
- Local and personalized technical support
- Want you to leverage our skills and experience as an extension and partner to your engineering team

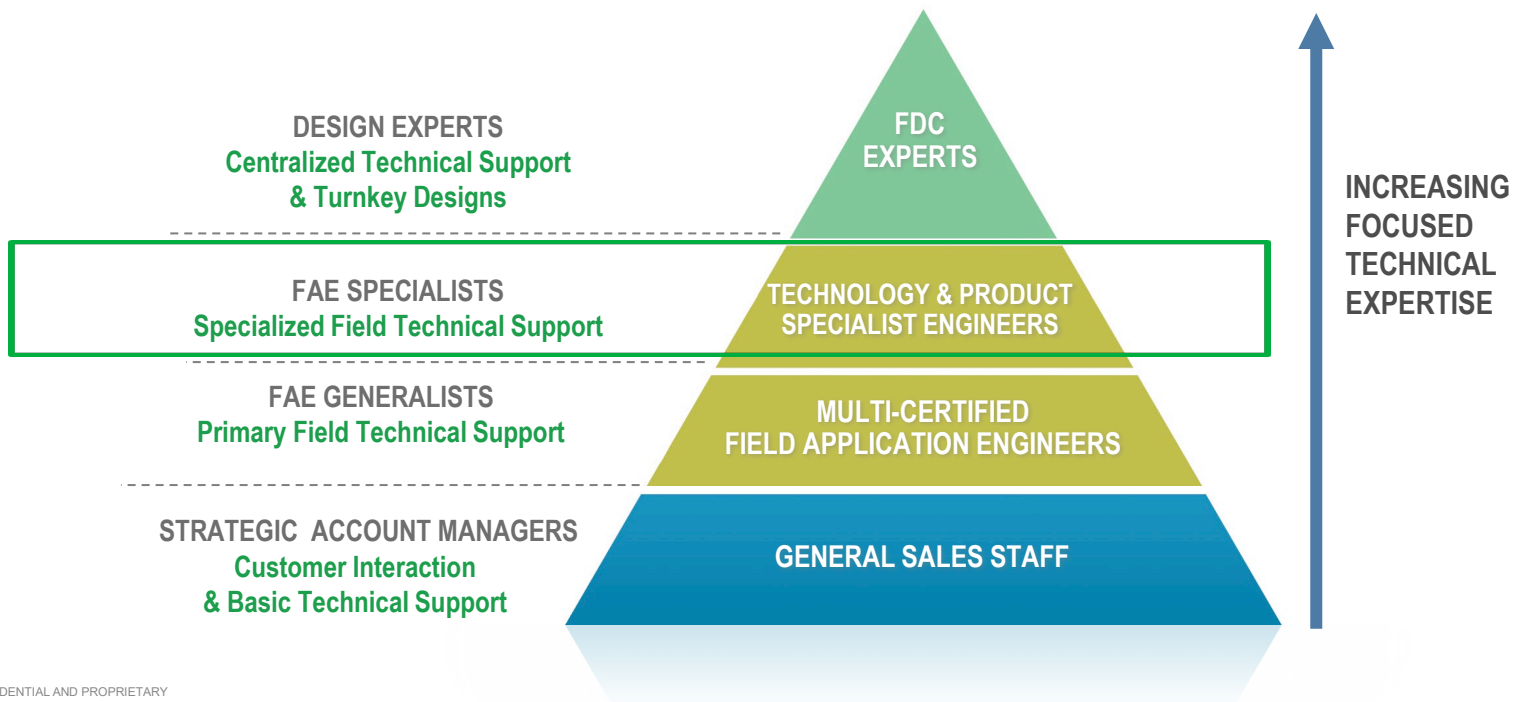
Generalists Expertise

- Represent our wide range of suppliers to provide the RIGHT solution
- Knowing the pros and cons of multiple technology options for your design helps your engineers choose correctly the first time and get to market faster
- Solutions architects with block diagrams creation
- Early access to new products introduction and products roadmaps



ENGINEERING GROUP

CUSTOMER SUPPORT MODEL



Specialist Engineering Teams

Specialist Engineering Value to our Customers

Specialists Expertise

- They are true technology experts who understand specific design complexities and are dedicated to overcoming them
- SWAT team of technology experts available to support generalists and customers to accelerate their time to market
- Physically involved at design level with customer



Analog & Power Specialists



Connectivity Specialists



Display Specialists



FPGA Specialists



Interconnect Business Development Managers



Lighting Specialists



Processor Specialists



Sensors Specialists

Leading Manufacturers



Broad Line Manufacturers

Power Manufacturers



Interface Manufacturers



Analog Signal Chain Manufacturers



Sensor Manufacturers



Clock & Timing Manufacturers



Specialist Engineering Teams

Future Connectivity Solutions (FCS)

Expertise

- RF design experience and all Wireless protocols
- On staff antenna expert designer for your needs
- Team with history of Compliance Certifications

Services Offered

- Live hands-on training and support throughout the design process
- Help weight the advantages and disadvantages of building your own RF circuitry to find right path
- Communication software stacks and Embedded Drivers
- Smart Devices Apps Development



WIRELESS LINE CARD

WI-FI Combo



Bluetooth



802.15.4 / Sub-GHz



Cellular / GPS



RFID / NFC



LoRa



Antennas



Specialist Engineering Teams

Sensor Specialists

Expertise

- Experts in Sensing applications
- Hardware and Software background
- Working closely with the Connectivity Specialist to support IOT applications

Services Offered

- Pool of demo kits available for evaluation and design support
- Design and Application support for the following sensors:
 - Accelerometer
 - Environmental
 - Image
 - Position/Speed
 - Acoustic
 - Flow
 - Inertial Combo
 - Pressure
 - Air Quality/Gas
 - Gyro/Angular Rate
 - Light/Color
 - Proximity
 - Biosensor
 - Humidity
 - Motion
 - Temperature



Amphenol
Advanced Sensors

amun



BOSCH

CYPRESS
EMBEDDED IN TOMORROW

DIODES
INCORPORATED

FLIR

IDT

infineon

maxim
integrated.

Melexis
INSPIRED ENGINEERING

NXP

ON Semiconductor



Panasonic

ROHM
SEMICONDUCTOR

SENSIRION
THE SENSOR COMPANY

ST
life.augmented

TE
connectivity

VISHAY

SENSOR CATEGORY LANDSCAPE

Air Quality / VOC Biometrics



- Air Quality / VOC
- Biosensing
- CO2
- Dust
- Gas

Environmental



- Humidity
- Flow
- Pressure
- Temperature

Inertial



- Accelerometers
- E-compass
- Gyroscopes
- Inertial / Combo
- Magnetometers
- Smart Hubs

Color / Optical / Proximity



- Ambient Light (ALS)
- Color Sensing
- IR Reflective
- Gesture
- Capacitive Touch
- Time of Flight
- 3D Time of Flight

Magnetic-Hall / Position-Speed



- Current
- Hall Switch / Latch
- Linear Hall IC
- Magnetic Rotary
- Magnetometer
- Inductive Position

Motion / Occupancy



- Pyroelectric IR (PIR)
- Thermopile
- IR Thermal Array
- Radar

Image / Modules



- Image sensors
- Compact camera modules
- Embedded Vision Systems

MEMS Microphones available with:

same sky



Specialist Engineering Teams

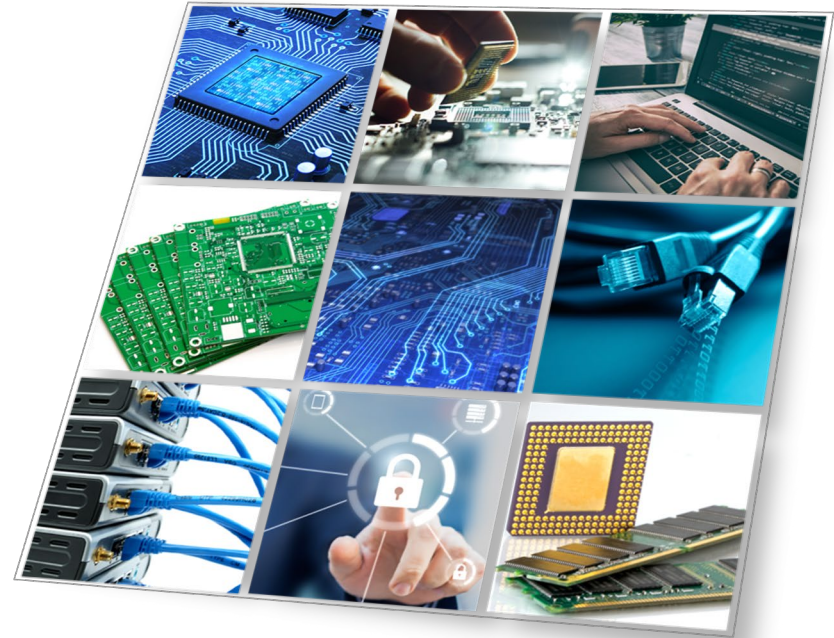
FPGA Solutions Team

Expertise

- Certified Engineers supporting MicroChip Efinix, Renesas, FPGA's
- 15+ years of programmable logic design experience per specialist
- Armed with custom evaluation platform to demonstrate the latest technologies available to customers

Services Offered

- Front End Tool & Implementation Guidance
- System Architecture Review
- HDL Training Verilog & VHDL
- Simulation & Test Bench Generation
- Soft & Hard Processor Core
- Intellectual Property Implementation
- AMBA Bus Implementation



Specialist Engineering Teams

Future Intelligent Solutions (FIS)

Expertise

- Hardware specialists covering Multi-Core and Multi-Media Processors
- Networking protocols and timing solutions
- Linux Kernel/SDK tools Software specialists

Services Offered

- Assist customers with networking circuit design with component selection, schematic reviews and design debugging
- Clock tree design and Timing validation
- Support high speed PCIe, Ethernet and Transceiver technologies
- Multimedia Hardware and Software support



LANDSCAPE (MCU / DSP / MPU/SOM/SBC)

Core IC Suppliers	Advanced MCUs (Class 1T, 24)	Microprocessors (Class 1H, K3)	FPGAs/SoCs (Class 3A, 3F)	Embedded Board Suppliers	SOMs/SBCs (Class T5)
			Trion, Topaz, Titanium	 	(Multiple processor options and board form factors available)
	PSoC Edge			 	
		SAMA5, SAMA7, SAM9, PIC64	PolarFire, PF SoC, IGLOO2, SF2, PolarFire 2	 	
	i.MX RT, MCX	i.MX, S32G, Layerscape		 	
	RA8	RZ	ForgeFPGA	 	
 life.augmented	STM32H7, STM32N6	STM32MP1, STM32MP2		 	

Specialist Engineering Teams

Interconnect Business Development Managers (IBDM)

Expertise

- Connector experts - focused on solutions for new applications
- Each IBDM has a minimum of 15 years experience in connector sales & engineering
- Well established relationships with suppliers product teams
- Experts in Interconnect design process

Services Offered

- Components selection support
- Pool of sample kits, for electrical and mechanical design support
- Visibility to NPI roadmaps



ADAM TECH
ADVANCED INTERCONNECT PRODUCTS AND SYSTEMS

Amphenol
ICC

AVAX

HARTING

HRS HIROSE
ELECTRIC
CO., LTD.

MAJOR LEAGUE
Electronics

TE
connectivity

WAGO

Specialist Engineering Teams

Future Display Solutions (FDS)

Expertise

- Deep user interface design understanding in order to provide best fit solution
- Identify where customization is needed and coordinate the project
- Full pool of displays demos available to customer

Services Offered

- LCD Cost Analysis and Alternatives
- High Bright / NVIS Integration
- Touch Screen Integration and Design
- Custom Glass Addition
- Optical Bonding
- OCA & Tape Bonding
- Passive Film Enhancements
- Integration and Assembly



Specialist Engineering Teams

Future Lighting Solutions (FLS)

Expertise

- Regional technical managers, each with 15 years minimum experience in the design and development of SSL systems
- Technical marketing engineers focused on customer solution requirements
- Optical design engineer with 20 years in optical modeling, design and analysis

Services Offered

- LED selection
- Measurements
- FLS Online tools
- Optical simulation
- Thermal simulation
- System optimization
- Integrated systems



Specialist Engineering Teams

Future Lighting Solutions (FLS)

simpleLED® Program



bridgelux.

ERP
POWER

INVENTRONICS

LEDiL

LUMILEDS

MTX
MechaTronix

NICHIA

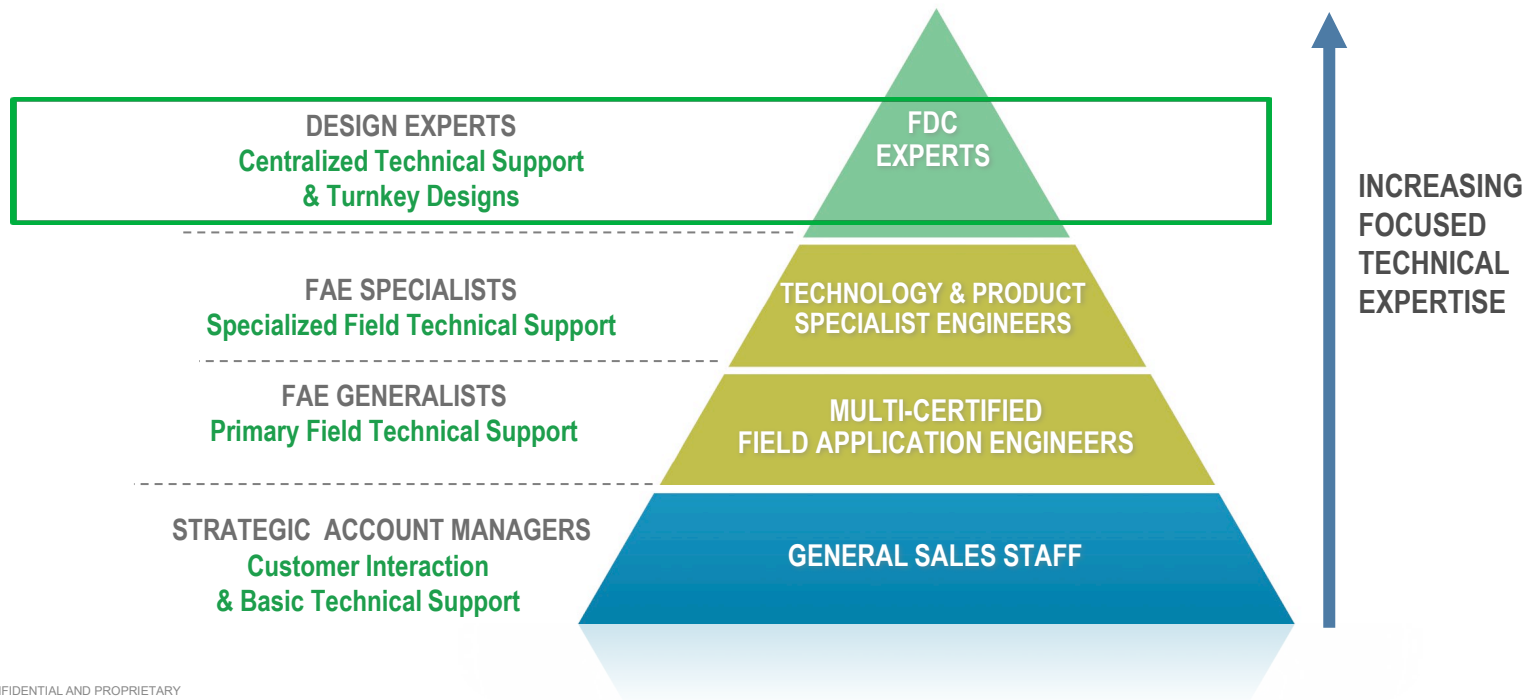
PHILIPS
SAMSUNG

SEOUL

SEOUL SEMICONDUCTOR

ENGINEERING GROUP

CUSTOMER SUPPORT MODEL



Future's System Design Center

Global Design Team

Design Centers Location

- Montréal (Canada)
- Paris (France)
- Egham (UK)
- Munich (Germany)
- Gdansk (Poland)
- Bangalore (India)
- Shenzhen (China)



FUTURE DESIGN CENTERS

CAPABILITIES

Electronics Circuits Design

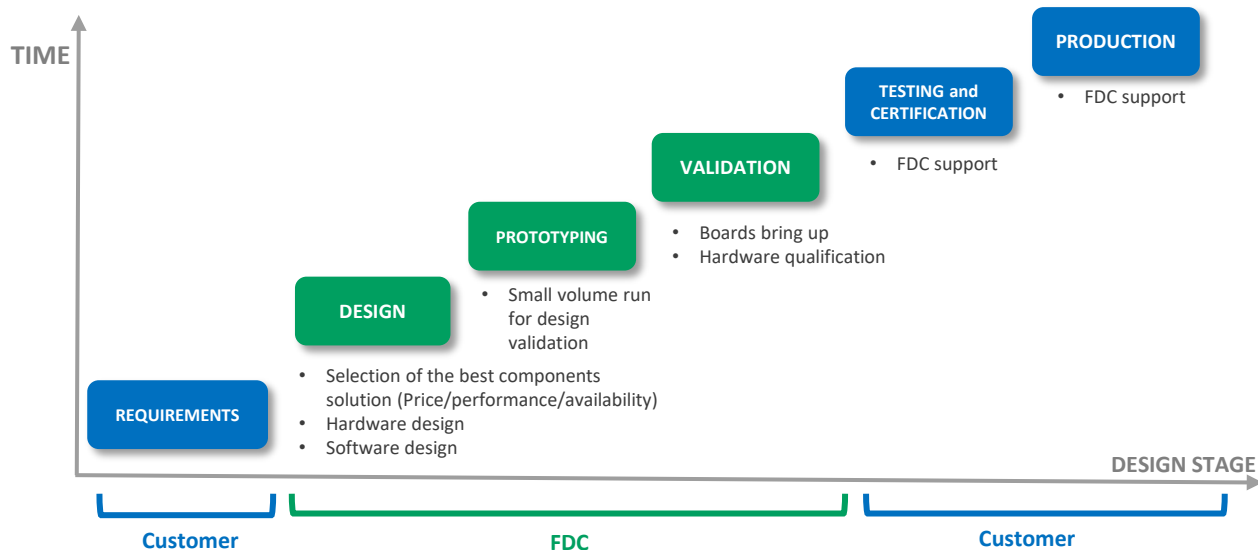
- Schematic (Altium Designer)
- PCB Layout (Altium Designer)
- Prototyping

Software and Firmware

- Validation firmware and BSP for our prototypes
- Application support
- FPGA design (Specialist Team)

Support

- Product Engineering Support
- Customers' Design Reviews



Future's System Design Center

Successful Projects History



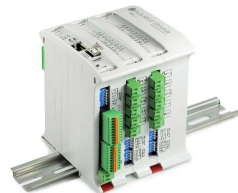
Embedded Wireless Platform



Wireless HMI Controller



300W MPPT Solar Converter



Industrial Controller



Portable Measurement Instrument



Bluetooth Medical Sensor



USB Temperature Logger



High Performance System-on-Module

NOTE: to protect IP, pictures are just for reference, not the actual designs

MAMA BEAR OVERVIEW

■ Processing

- i.MX8M Plus
 - 4x Cortex-A53 1.8 GHz
 - Cortex-M7 800 MHz
- DDR4 2GB
- eMMC 64GB
- SDcard
- Security

■ Interfaces:

- Image Sensor (MIPI)
- HDMI and LCD output (MIPI)
- Audio input /output
- Standard Raspberry Pi 40 pin I/Os Header

■ Connectivity:

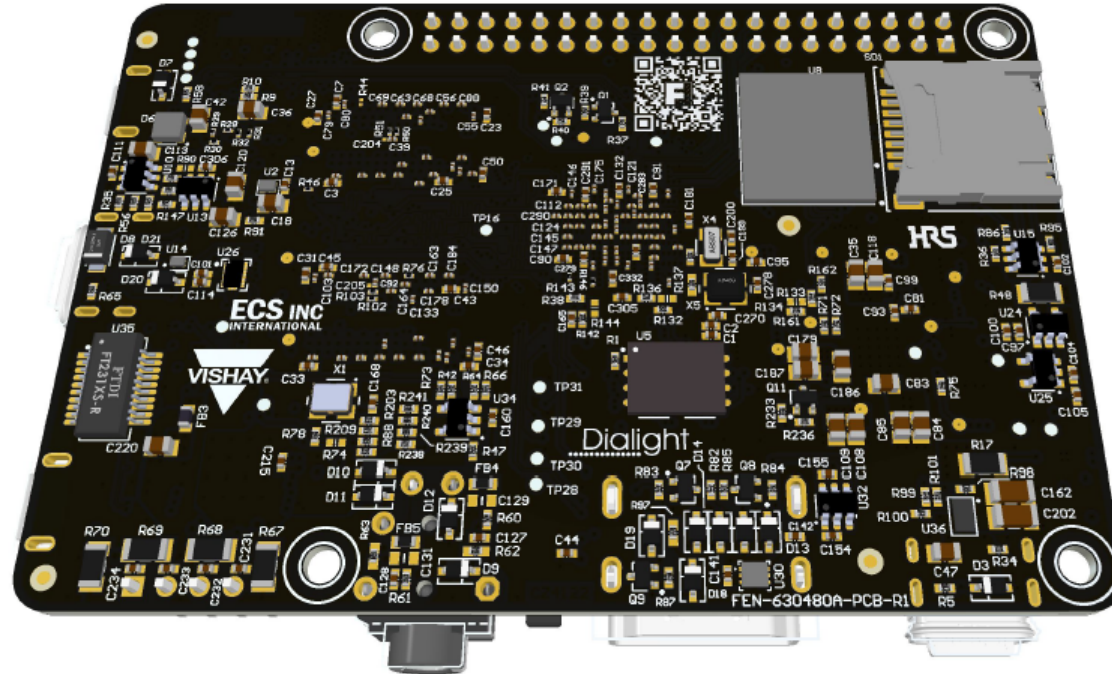
- Wi-Fi 6, BLE 5.2, 802.15.4 (Matter)
- USB 2.0, 3.0 (Type C)

■ Compact form factor

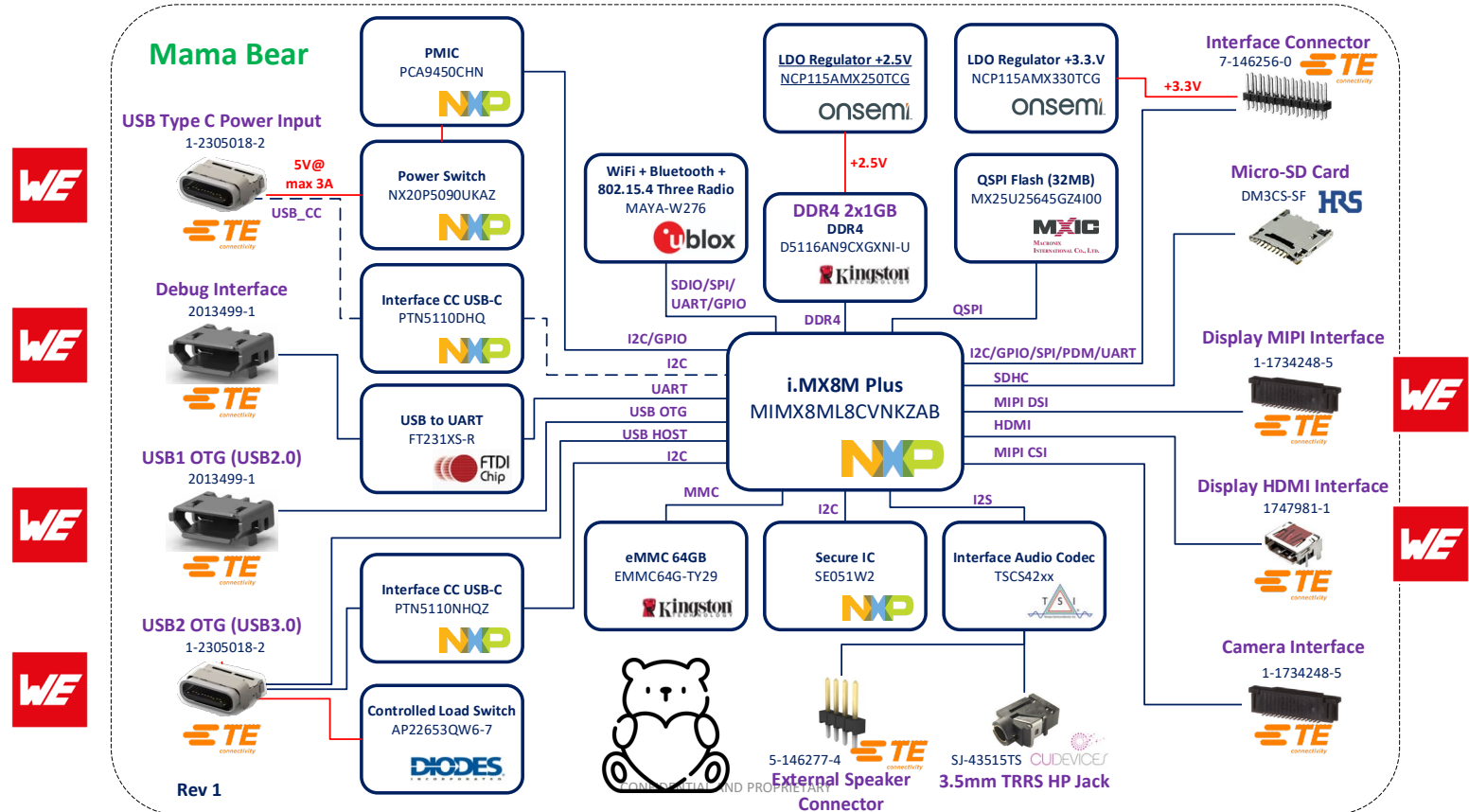
- Raspberry Pi Model B/B+ (Equivalent)



MAMA BEAR



MAMA BEAR BLOCK DIAGRAM



FUTURE DESIGN CENTER

CORE VALUES



INTEGRITY



COMMITMENT



TEAMWORK



COURAGE

Industry Leading Technical Team

Future's Advanced Engineering Group – Dedicated to Your Success



- Best in class globally integrated engineering team
- Dedicated team of technology specialists all available for our customers
- Always providing our customers with best fit supplier agnostic solutions
- Continued unique & sustained investment in engineering training programs

John.Parker@FutureElectronics.com

**Extend your partnership with Future Electronics
to ensure continuity and success!**