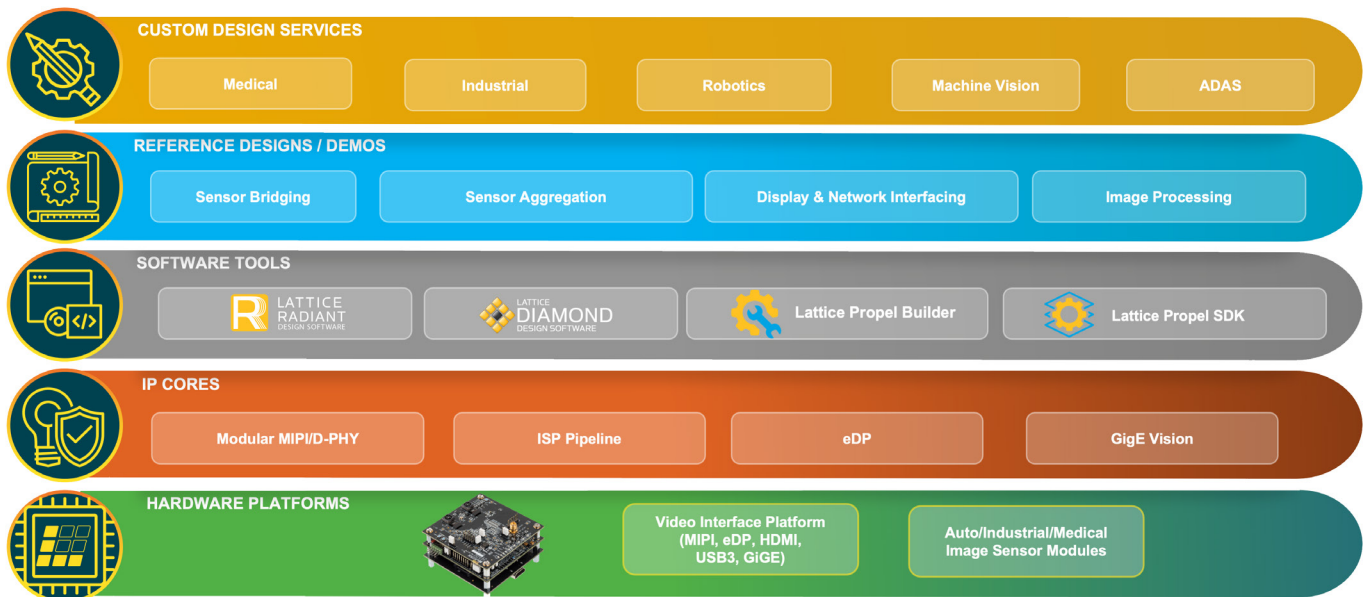


Lattice mVision Solutions Stack

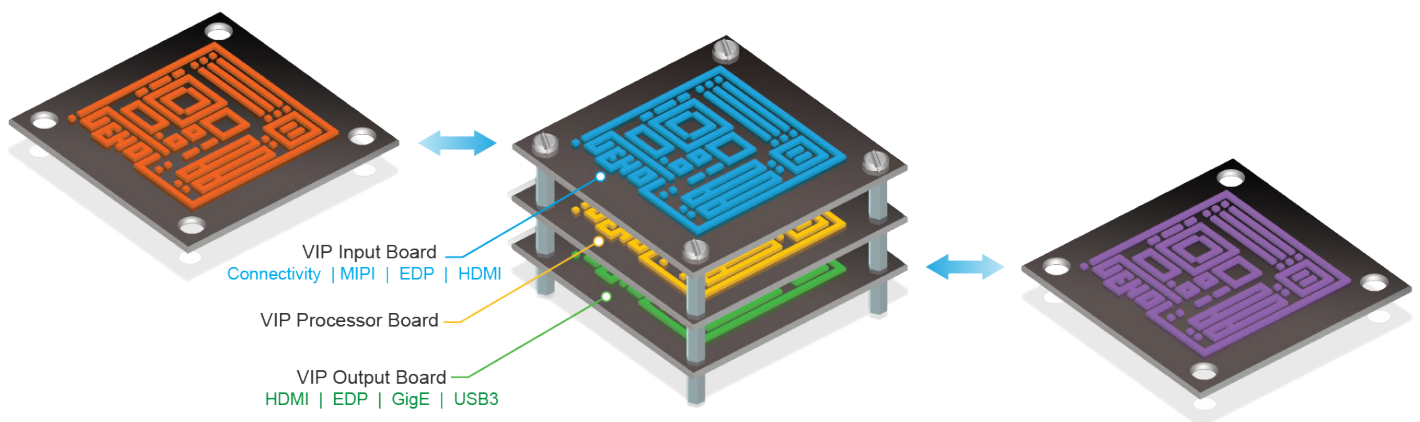
Accelerate Implementation of Low Power Embedded Vision Applications

With solutions optimized for low power consumption ranging from under 150 mW to 1 W and small package size (2.5 x2.5 mm to 10x10 mm) Lattice mVision solutions stack provides customizable performance and flexible interface connectivity (MIPI CSI-2, LVDS, PCIe, GigE, etc.). Lattice's mVision solutions stack accelerates the integration of scalable Embedded Vision solutions for Smart Factory, Machine Vision, Smart City, and Smart Home applications.



Lattice mVision Hardware Platforms

The Lattice mVision solutions stack uses the award winning Video Interface Platform (VIP) (<http://www.latticesemi.com/vip>) which is the ideal hardware for embedded vision designs and it provides a highly flexible, smart modular solution for embedded vision designers who need to build a prototyping system quickly.



Lattice mVision IP Cores

- CSI-2/DSI D-PHY Receiver
- CSI-2/DSI D-PHY Transmitter
- Byte to Pixel Converter
- Pixel to Byte Converter
- SubLVDS Image Sensor Receiver
- FPD-LINK Receiver
- FPD-LINK Transmitter
- Color Space Converter
- Video Frame Buffer
- Gamma Corrector
- 2D Scaler

Lattice mVision Partner IP

- Helion IONOS Image Signal Processing (ISP)
- Britec DisplayPort IP
- Helion GigE Vision IP

Lattice mVision Design Tools

Lattice's mVision solutions stack uses Lattice's standard Radiant and Diamond FPGA design tools for ease of use and fast system design.



Lattice mVision Reference Designs

- N Input to 1 Output MIPI CSI-2 Camera Aggregator Bridge
- 4 to 1 Image Aggregation with CrossLink-NX
- SubLVDS to MIPI CSI-2 Image Sensor Bridge 4 to 1 Image
- MIPI DSI/CSI-2 to OpenLDI LVDS Interface Bridge

Lattice mVision Demonstrations

- 4 to 1 Image Aggregation Demo for CrossLink-NX Image Input Board
- 2 to 1 side by side Demo for CrossLink on EVDK
- 3D Depth-Mapping
- Video over USB3
- Video over Ethernet
- DisplayPort Transmit Demo
- Helion GigE Vision
- IONOS ISP from Helion
- DisplayPort Receive Demo

Lattice mVision Custom Design Services

Have custom Embedded Vision solutions needs? The Lattice mVision stack includes an ecosystem of select, global design service partners that can deliver custom solutions for a range of end-applications, including factory, smart home, smart city, and smart cars. Please contact your local sales representative to request more information.

