mercury

SBC3515-S
3U OpenVPX Single Board Computer with BuiltSAFE®

Tackle AI and aircraft safety-critical workloads with confidence

- Intel® Core™ Gen 11 processor
- Integrated Iris Xe Gen12 GPU
- Safety certifiable with complete DO-254 and DO-178C artifacts
- 10 Gb Ethernet
- 35 W power-efficient performance
- Rugged and SOSA aligned

TECHNICAL SPECIFICATIONS

Processor
Intel® Core™ Gen11 i7-1185GRE

Quadcore dual thread @2.8 GHz

Vector (AVX-512) and AI accelerators

Technology 10 nm on SuperFin transistor

Integrated Graphic Processing Unit
GPU Iris Xe Gen12 Gfx with up to 96 EUs

Video encode/decode H264/H265

BuiltSAFE® Proven Elements
DO-254 hardware

DO-178C graphics, compute, and video encode/decode software

Board monitoring and health alarms

Design and information assurance

Memory
32 GB DDR4-3200 in-band ECC memory

Up to 128 GB on-board SSD

Configurable I/O
Up to 4 independent display units

2x 10 G Ethernet

1x 1000 BASE-T Ethernet with TSN

2x SATA

Fabric Interface
PCIe Gen3 2x 4-lane, 4x 2-lane

SOSA/OpenVPX slot profile MOD3-PAY-1F1F2U1TU1T1U1T-16.2.15-2

System Management
On-board IPMI controller VITA46.11

Mechanical
3U OpenVPX, 1.0" slot pitch, VITA 65

XMC slot, VITA 61

    P1: X12d pins to VPX backplane

    P2: X8d + X16s pins to VPX backplane

Rugged and Low Power
Temperature: -40°C to 85°C card edge

Air- or conduction-cooled configurations

35 W power consumption
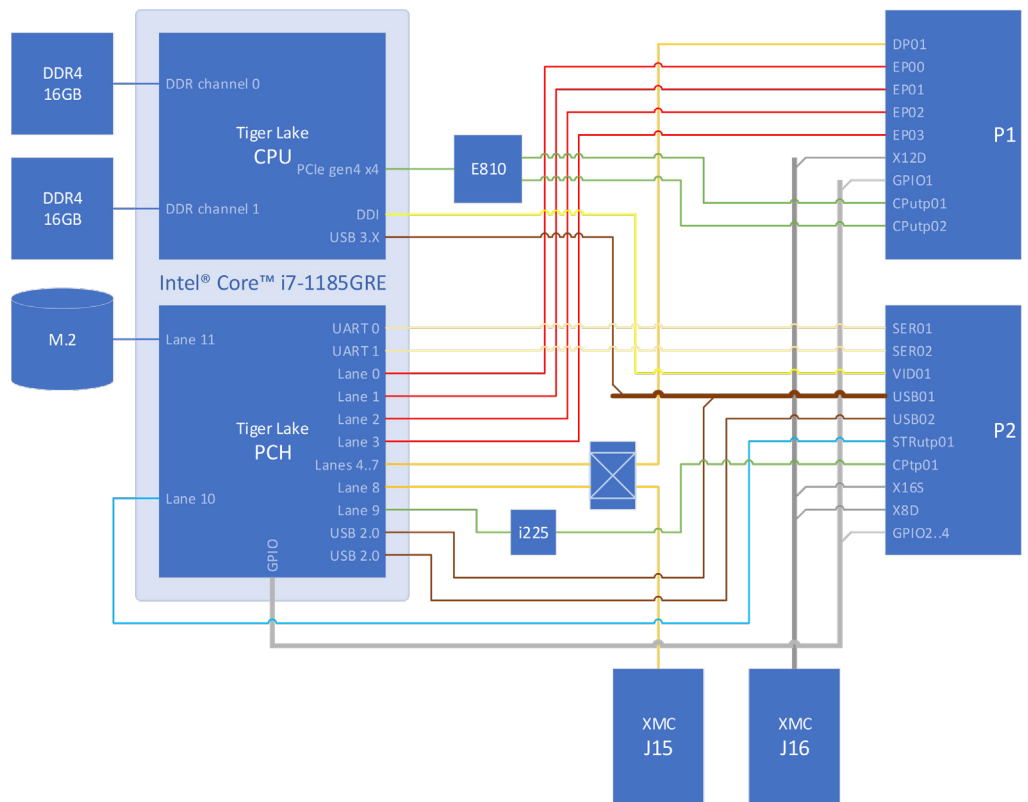
[Advanced rugged packaging options](#)

Partnering with

intel partner | Titanium IoT Solutions

TECHNICAL SPECIFICATIONS

Board Support Packages (BSP)

Linux

Greenhills

DeOS

LynxOS

PikeOS

WindRiver

SBC3515-S Block Diagram