

## ON-BOARD PROCESSING AND DIGITAL RF TRANSCEIVER DEVELOPMENT KITS

*A Trident development platform with lab-standard interfaces utilizing flight-like hardware. Pre-loaded with Trident Firmware and Software for application development and testing. On-site and remote support available with each kit.*



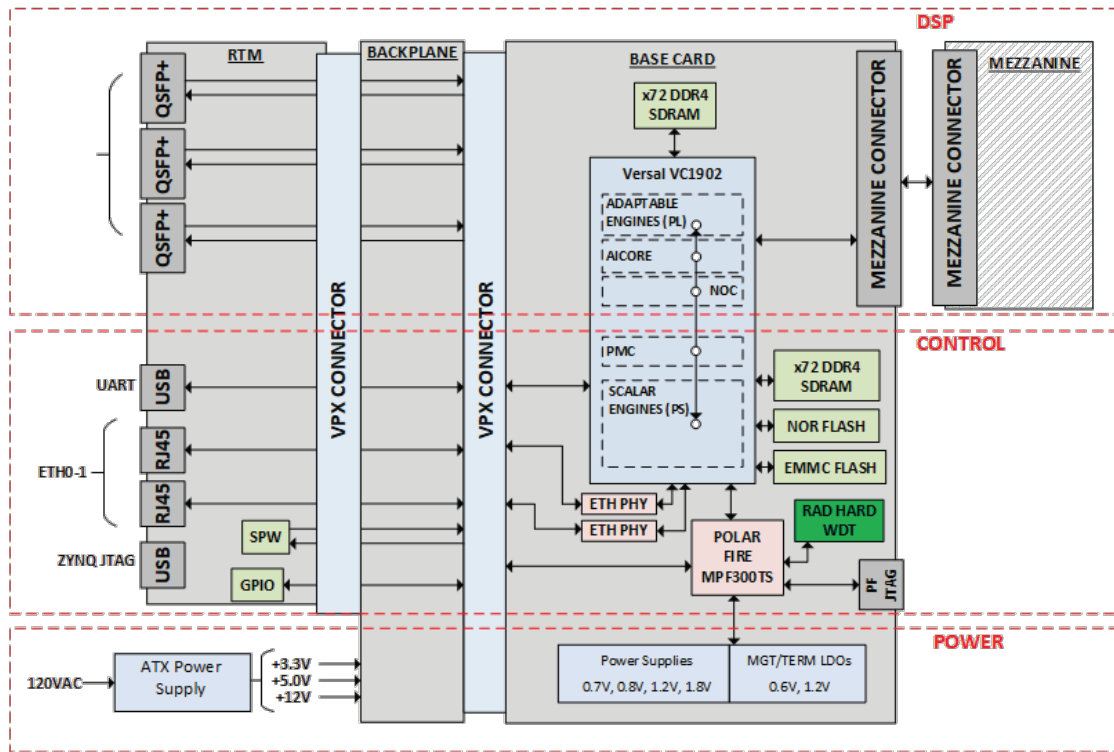
Lab Development on  
Trident Flight-Like  
Hardware

### Customizable Development Kits

Trident VDRT Development Kits are lab-based development platforms, preloaded with Trident FW/SW (source files included), for application development, testing, and HWIL demonstrations on Trident Hardware. Compatible with Tridents 3U VPX modules, the kits provide operational and developmental interfaces to flight-like hardware with “lab-friendly” interfaces. These kits are a low-cost, rapidly available platform for new and existing customers. Customization available.

### Rapid Response Methodology

Development Kits are an integral part of Trident’s Rapid Response methodology which enable our customers success on fast-paced, cost constrained, modern space programs. Demonstrated on multiple flight programs, contact us to learn how we can apply this methodology to your programs.



## SPN-06355 VDRT DevKit Specifications

- Integrated VDRT EDU with XVCV 1902-1MSIVIVA1596 with flight and developmental interfaces
  - Two (independent) DDR4 Memory Banks w/ ECC
    - PS assigned 8GB bank
    - PL assigned 4GB bank
  - 16 GB (minimum) NAND Flash, 256MB Redundant NOR Flash
  - Two PS Ethernet (RJ45)
  - Three Versal GTY Quad (QSFP+)
  - Two (2) Versal UART connections (USB)
  - Versal JTAG (USB)
  - 1 Pulse Per Second (SMA)
  - Discrete boot and power control
  - Minimum 1 TB SSD on mezzanine site optional

## Included Source Files and Docs

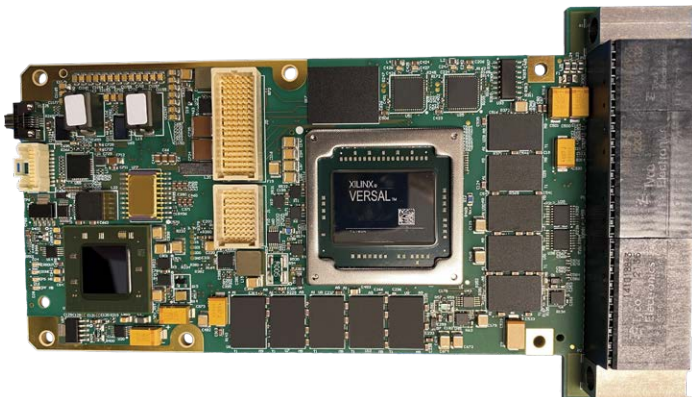
- Trident Yocto Layer BSP
- Example Vivado Project
  - NOC configuration (DRAM / Interconnect)
  - AICore Demo
  - Processor configuration
- Pin constraints for the entire chip (XDC)
- Engineering GUI and C2 GUI for Flight SW
- HW User Manual and Documentation

## SWaP

- Benchtop or 19" rack-mountable (3U height)
- 120 VAC (Integrated Power Supply)
- ~8 kg, shipped in protective storage container

## Rapid Availability

- From stock to 14-16 weeks
- On-site and remote support available
- Kit Customization is available for additional interfaces and other mezzanine cards



Contact Us: [SES-BD@tridsys.com](mailto:SES-BD@tridsys.com)