

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

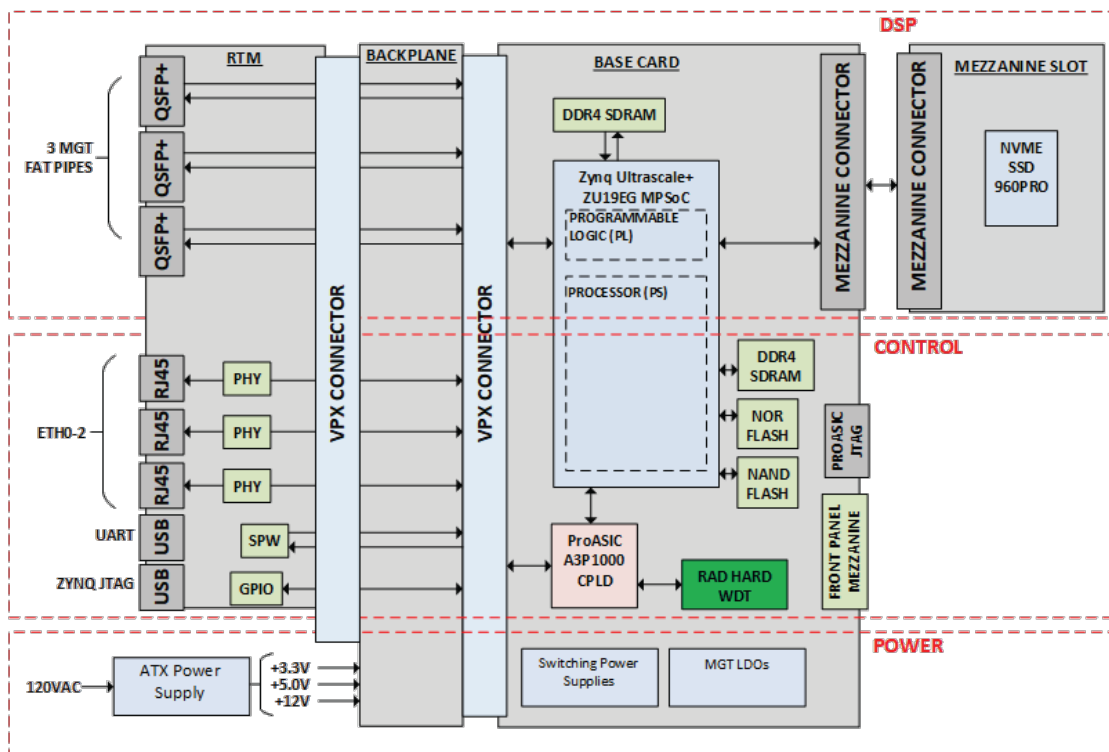
Customizable Development Kits

Trident xDRT 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. Currently available for the UDRT and RDRT with the VDRT available in Q2-2022. Customization available.

Rapid Response Methodology

Development Kits are an integral part of Trident's Rapid Response methodology which enable our customers on fast-paced, cost constrained, modern space programs.

SPN-05007 UDRT DEV KIT SPECIFICATIONS



Included Source Files and Docs

- Trident Yocto Layer BSP
- Zynq processor configurations (TCL)
- Zynq Programmable Logic SDRAM setup (XCI)
- MGT setup constrained by REF CLKs (XCI)
- Pin constraints for the entire chip (XDC)
- Example Project/Bitstreams
- Engineering GUI and C2 GUI for Flight SW
- Library and HW User Manual and Documentation



SPN-05007 UDRT DevKit Specifications

- Integrated UDRT EDU with XQZU19EG-1FFRC1760M in LVAUX mode with flight and developmental interfaces
- 4 GB PL and 4 GB PS DDR4 Memory
 - 1 GB NAND Flash, 128 MB Redundant NOR Flash
 - Two Zynq-PS Ethernet (RJ45)
 - Zynq GTY Quad (QSFP+)
 - Two (2) Zynq UART connections (USB)
 - Zynq/ProASIC JTAG (USB, integrated Pod)
 - 1 Pulse Per Second (SMA)
 - Discrete boot and power control
 - Includes 1 TB SSD on mezzanine site

SWaP

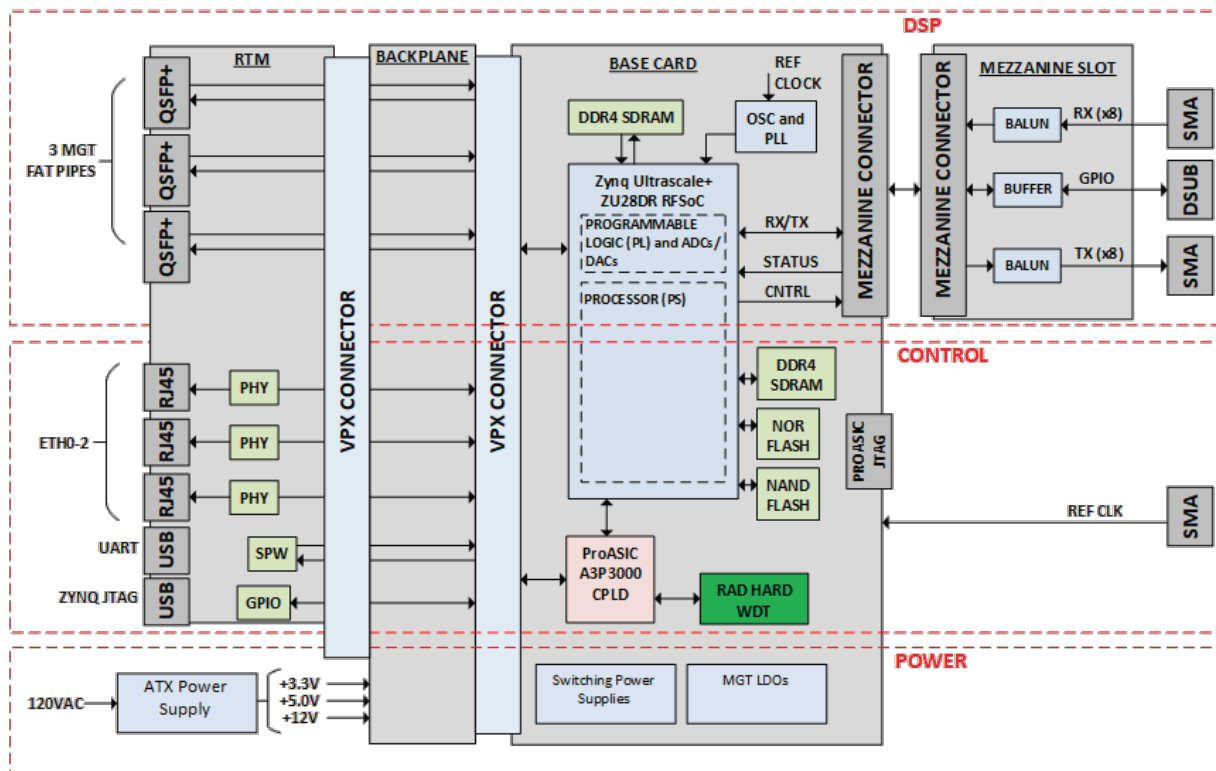
- Benchtop or 19" rack-mountable (3U height)
- 120 VAC (Integrated Power Supply)
- ~8 kg, shipped in protective storage container

Rapid Availability

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

Contact Us: ES-BD@tridsys.com

SPN-05040 RDRT DEV KIT SPECIFICATIONS



Included Source Files and Docs

- Trident Yocto Layer BSP
- Zynq processor configurations (TCL)
- Zynq Programmable Logic SDRAM setup (XCI)
- MGT setup constrained by REF CLKs (XCI)
- Pin constraints for the entire chip (XDC)
- Example Project/Bitstreams
- Engineering GUI and C2 GUI for Flight SW
- Library and HW User Manual and Documentation
- Compatible with Xilinx "RF Analyzer" Tool

SPN-05040 RDRT DevKit Specifications

Integrated RDRT EDU with XQZU28DR-1FFRG1517M in LVAUX mode with flight and developmental interfaces

- 8 TX and 8 RX Channels (50 ohm, SMA)
- 4 GB PL and 4 GB PS DDR4 Memory
- 1 GB NAND Flash, 128 MB Redundant NOR Flash
- Two Zynq-PS Ethernet (RJ45)
- Zynq GTY Quad (QSFP+)
- Two (2) Zynq UART connections (USB)
- Zynq/ProASIC JTAG (USB, integrated Pod)
- 1 Pulse Per Second (SMA)
- Discrete boot and power control
- Programmable GPIO (routed on mezzanine)

SWaP

- Benchtop or 19" rack-mountable (3U height)
- 120 VAC (Integrated Power Supply)
- ~9 kg, shipped in protective storage container

Rapid Availability

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

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