

# DESIGNCORE™ RVP-TDA3x DEVELOPMENT KIT



A rugged Development Kit in a finalized product form-factor lets you evaluate Advanced Driver Assistance System (ADAS) technology under realistic on-vehicle conditions.

## Rugged Vision Platform (RVP) with TI TDA3x Automotive Processor

### SPEED DEVELOPMENT OF AUTONOMOUS VISION-BASED NAVIGATION SYSTEMS

The DesignCore™ RVP-TDA3x Development Kit accelerates your development of autonomous vision-based navigation systems for automotive, transportation, and materials-handling applications.

The Development Kit is based on advanced vision processors from Texas Instruments and D3's advanced vision software framework. It enables synchronous acquisition of four HD video streams with real-time vision processing and analytics.

Developed using a design-for-manufacture (DFM) process, the Development Kit has an optimized layout and BOM. With D3's design services, this Development Kit lets you concentrate on your value-add and get to market faster.

### FEATURES

Texas Instruments TDA3x SoC Processor

FPD-Link III video inputs (4) with 2 GHz and 4 GHz options available

HDMI and FPD-Link III video display outputs

Ethernet, CAN bus, and serial connectivity

Compact, rugged packaging for on-vehicle testing

### APPLICATIONS

**Advanced Driver Assistance Systems (ADAS)**

Front or rear camera

2D/3D Surround View

Radar

Driver monitoring

Camera monitoring systems (CMS)/mirror replacement

**Autonomous Shipping and Transportation Systems**

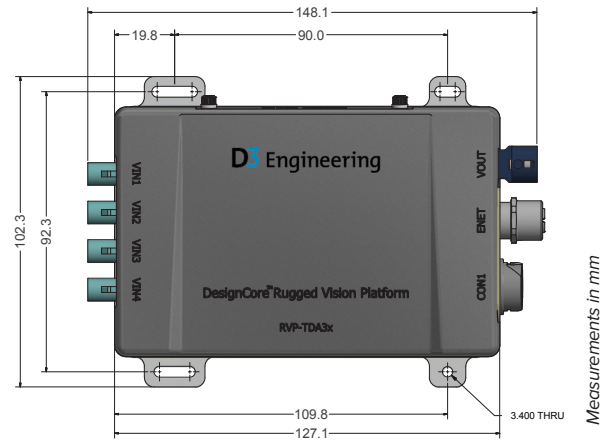
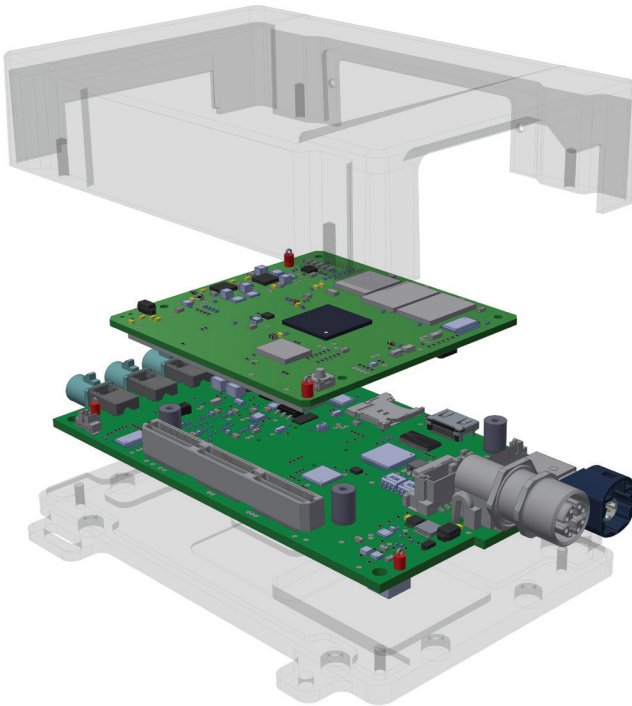
**Autonomous Guided Vehicles (AGV)**

**Collaborative Robotics**

**Industrial Vehicle Systems**

## SPECIFICATIONS

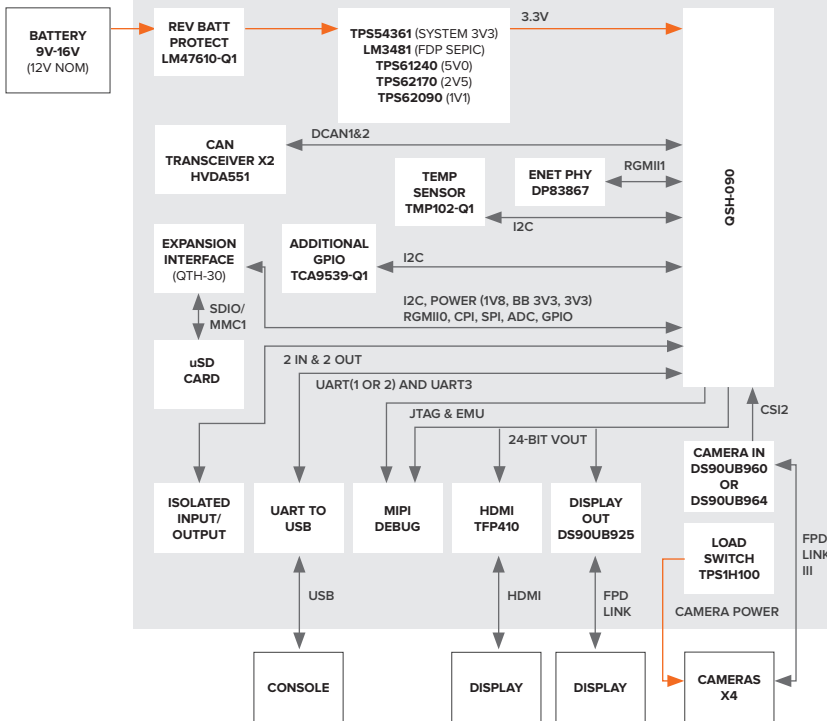
DDR	2GB + ECC
eMMC	none
QSPI	512Mbit
FRAM (EEPROM)	512Kbit
Ethernet Gbit (DP83867)	1
Video Ports Capture	CSI2 ADAS hub (4 ports)
Display	1 HDMI and 1 FPD Link (mirrored)
CAN	2
UART (USB to UART bridge)	1 USB bridge, 1 logic level
uSD Card	1 SDIO
Isolated IO	2 in and 2 out
USB	none
SATA	none
A15 Core(s)	none
DSP Core(s)	2
IPU/M4 Core(s)	1 with 2 CPUs
EVE Core(s)	1
ISS Core(s)	1
Ambient Temperature	-40C to 85C (enclosure)
Component Temperature	-40C to 95C (DDR3 case limited)
Power	9V to 40VDC with reverse bat
BSP	D3 software frameworks/TI BIOS Vision SDK
Expansion	RGMI, I2C, UART, SPI, parallel camera
JTAG	60 pin and 14 pin with adapter
Enclosure	Rugged aluminum
Access Panel	14 pin JTAG, USB/UART, uSD card, HDMI



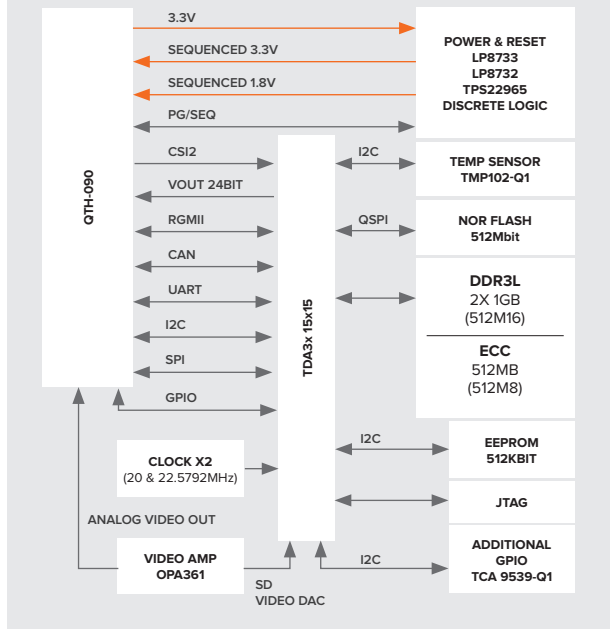
Measurements in mm

The RVP Development Kit features an optimized SOM board with advanced vision processor, firmware, and a customizable baseboard with IO, power, expansion interface, and more. We use the Development Kit to rapidly develop your Engineering Verification Test (EVT) unit, dramatically reducing technical- and schedule-risk.

TDA3x BASEBOARD



TDA3x SOM



ACCELERATE TIME TO MARKET

D3 Engineering will leverage our industry-proven DesignCore™ Platforms to meet your unique product requirements, while minimizing technical- and schedule-risk for your development program.

CALL: 585-429-1550  
 EMAIL: sales@D3Engineering.com  
 VISIT: D3Engineering.com