

3U VPX Development Platform

Open Frame Reduces System Design Time

The DK3 is a flexible benchtop platform providing the scalability to support rapid development, demonstration and evaluation of 3U VPX based systems. It enables shortened design cycles for faster time to deployment in critical applications. The DK3 allows fast backplane replacement and fast conversion between air and conduction cooled slot inserts. The open frame design includes backplane, power supply, fan cooling and rear transition slots in support of a variety of test functions. Backplane choices support up to twelve 3U VPX modules and individual slots are easily configurable to accept either conduction or air-cooled modules.

The DK3 is part of the LCR family of benchtop development solutions supporting VPX system development and the hardware convergence and interoperability initiatives of the US Department of Defense.



The DK3 supports VPX development and integration activities for high speed C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) systems operating in mission critical defense applications.



Features

- Quick-conversion air or conduction cooled slot inserts
- Fast and easy backplane conversion
- Open access design with a carrying handle
- Accepts application specific or power and ground backplanes
- Supports up to 12 (.8" pitch) VPX modules
- .8", 1.0" and 1.2" slot pitch options
- Adjustable speed high cfm fans
- Rear transition module slots
- Integrated AC / DC power supply

Benefits

- Allows testing of air or conduction cooled modules
- Easily swap backplanes to support development progression
- Flexible reconfiguration supports multiple development stages
- Portability promotes collaborative engagement
- Enables single module or application level testing
- Easy test probe access speeds up development

LCR Embedded Systems

9 South Forrest Ave.

Jeffersonville, PA 19403

SPECIFICATIONS

Physical

Dimensions excluding feet and handle: 12" (H) x 12.5" (W) x 16.5" (D)

Weight: Approximately 39lbs

Power Supply

Integrated AC-to-DC 1000W power supply
5V Centric Version Standard (12V Cen Available)

Outputs;
MAIN: +12V, +5V, +3.3V
*AUX: +3.3V, +12V, -12V
*Note: AUX voltages use main voltage rails

Thermal

Push-pull cooling in front, pull cooling over RTMs
5 upper and 2 lower fans
Automatic fan speed control

Conduction cooled guides feature air passthrough cut-outs
Removeable side plates to direct airflow

Environmental

The DK3 is intended for lab use in benign environments

Standards Compliance

Compliant to mechanical spec VITA48.1 and 48.2

Controls and I/O

Rear switch for AC ON/OFF

Status indicators: AC, +12V, +5V, +3.3V, -12V

Backplane Options

8 slot power and ground backplane, 1.2"
6 slot BKP3-DIS06-15.2.7-x, RTM, 1.2" pitch
8 slot BKP3-CEN08-15.2.15-x, RTM, 1.2" pitch

Slot Profiles

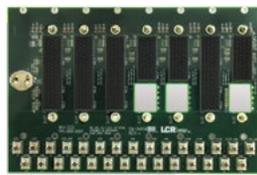
Pass through
(5) SLT3-PAY-2F2T-14.2.5, (1) SLT3-SWH-16T-14.4.6
(6) SLT3-PAY-2F2U-14.2.3, (2) SLT3-SWH- 6F6U-14.4.1

Consult LCR regarding other available backplanes

Related Products



DEPLOYMENT CHASSIS



CUSTOM 3U VPX BACKPLANES



3U VPX LOAD BOARDS



VPX TEST FIXTURES

LCR provides a full line of VPX products and services - everything you need from development to deployment including; COTS rugged application ready chassis solutions as well as custom designs, custom 3U VPX backplanes supporting the latest slot profiles plus development tools including load boards and test fixtures.

ORDER NUMBER	DESCRIPTION
7JM-100-0086-1	DK3 development chassis with 1.2" pitch conduction-cooled slots and an 8-slot power and ground pass-thru backplane, 5V Centric
7JM-100-0086-2	DK3 development chassis with 1.2" pitch air-cooled slots and an 8-slot power and ground pass-thru backplane, 5V Centric
7JM-100-0086-x	Custom configuration DK3 development chassis

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