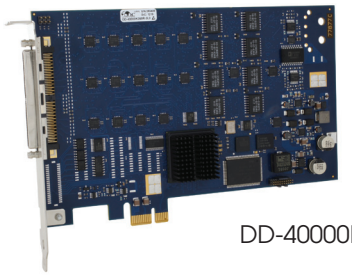
PCIe/PMC/PCI/cPCI/PXI Boards
with up to 36 ARINC 429 Channels & ARINC 717

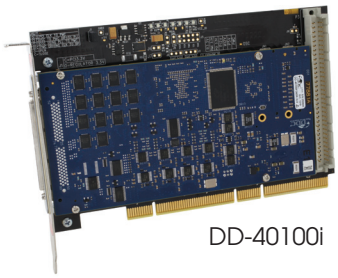
Connectivity Power Control

Product Brief

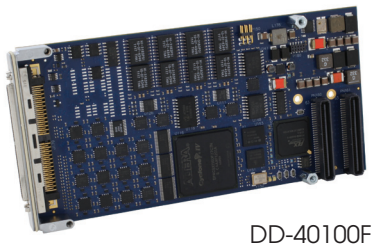
Model: DD-40X00X



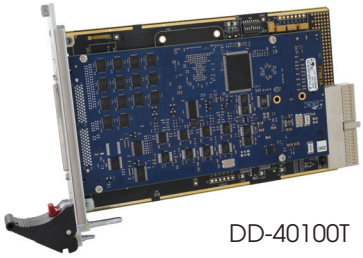
DD-40000K



DD-40100i



DD-40100F



DD-40100T

ARINC 429
ARINC 717
DISCRETE

The world's only boards offering up to 36 ARINC 429 Channels that can be individually programmed for Transmit/Receive functionality with parametric test features, variable output voltage, and voltage monitoring on board. Providing an optimal solution for both commercial and military test applications, DDC's ARINC 429/717 series offers flexibility and efficiency by enabling users to configure I/O mix and use one board for all levels of testing and simulation.

Key Features

- Front I/O PMC, PCI, & cPCI/PXI Boards
- x1 Lane Bridgeless PCIe Board with MSI IRQ Support
- DMA Engine for Ultra Low CPU & PCI/PCIe Utilization
- 6, 10, 18, or 36 Prog. Tx/Rx ARINC 429 Channels
- Up to 2 Prog. Tx/Rx ARINC 717 Channels
- Up to 16 Avionics Discrete I/O
- IRIG-B Input & Output
- Variable Output Voltage on 8 Channels
- Voltage Monitoring with Scope View on 8 Channels
- 48-bit/100ns Time Tag
- Programmable Speed Per Channel (500bps - 200Kbps)
- Full Error Detection & Injection Per Message
  - Variable Inter-Message Bit Gap from 1 to 32K Bits
  - Variable ARINC Message Length from 2 to 33 Bits
  - Parity Selection
- Real Time Asynchronous Message Insertion
- Real Time Data Modification
- Fully Independent Channel Operation
- FIFO or Mailbox Rx Methods
- Label/SDI Filtering Per Channel
- Onboard Hardware Scheduler
- Bus Playback
- RoHS Compliant

Benefits

- Programmable Tx/Rx ARINC Channels
  - Provides Complete Flexibility to Define Your I/O Mix
  - Facilitate Hardware In-the-Loop Testing and Integration
- Variable ARINC Speed Output Allows Compatibility with Many ARINC Specifications that Run a Different Defined Speed
- Voltage Monitoring Allows for Debug of Your ARINC Bus Without a Scope

Applications

- Systems Integration Labs
- Simulators
- Production Test Stands
- Automated Test
- Commercial Aerospace
- New Product Development
- System Troubleshooting
- Portable Testers
- Flight Line Diagnostics
- Flight Testing
- Software Development
- Data Loading
- Data Monitoring
- Bus Debugging & Diagnostics

Need a Custom Solution?
DDC can customize designs for all products, ranging from simple modifications of standard products to fully customized solutions for commercial, military, aerospace, and industrial applications.

For more information: www.ddc-web.com/DD-40X00X

Ordering Information

DD-40X00X XXX R-XL0

Operating Temperature:
- **JL** = 0°C to +55°C (PCI & cPCI/PXI Boards only)
- **3L** = 0°C to +71°C (PCI-Express & Front I/O PMC Boards only)

I/O Option	# of 429 Ch	# of 717 Ch	Avionics Discrete I/O	IRIG-B In & Out	Voltage Monitoring	Variable Voltage Output
060	6	0	0	✓	0	0
100	10	2	16	✓	8	8
180	18	2	16	✓	8	8
360	36	2	5	✓	8	8

Card Type:
- **40000K** = PCI-Express Board
- **40100F** = Front I/O PMC Board
- **40100i** = PCI Board
- **40100T** = cPCI/PXI Board

Included Software Development Kits:
- 32-bit Windows® XP Support
- 32/64-bit Windows Vista/7/8/10/Server 2008/Server 2011 Support
- .NET Support Available - Contact Factory
- 32/64-bit Linux® Support
- VxWorks Support - Contact Factory

Included Accessories:
- Mating Connector and Shell

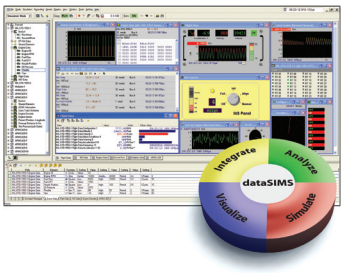
Optional Cables:
- PCIe: P/N DDC-78149-1
- PMC/PCI/cPCI: P/N DDC-78149-2

Optional Software:

Commercial Avionics Utilities

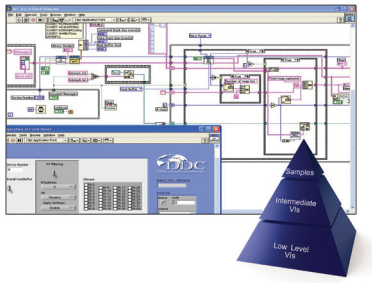
Model: DD-42999S0-XX0
- Graphical ARINC 429 data bus analysis and simulation
- Advanced filtering, message scheduling, and triggering
- Graphical ARINC 615 data loader to load data to and from airborne computers

dataSIMS
Avionics Data Bus Test & Analysis Software



Model: BU-69414DS-64VM
- Accelerates development and deployment
- Eliminates cost of learning and maintaining separate software programs
- Easy-to-use and customize
- Supports all data protocols and I/O formats

LabVIEW® & LabVIEW Real-Time Support



Model: BU-69093S0-XX0
- Simple interface for quick startup and easy programming
- Access real-time 1553/429 data using LabVIEW
- Easily integrate data from different types of instruments and sensors
- Create custom user interface from scratch or by modifying samples

DATA DEVICE CORPORATION
REGISTERED TO:
ISO 9001:2008, AS9100C:2009-01
EN9100:2009, JIS Q9100:2009
FILE NO. 10001296 ASH09

For ordering assistance and technical support,
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