

FEATURES

- MPCIE (USB) TO DUAL CAN2.0A/B/FD PORTS WITH EXTENDED CAN232 INTERFACE
- COMPLIES WITH CAN SPECIFICATIONS 2.0 A/B AND FD
- TIME STAMP RESOLUTION AT 1 μ S OR 1MS
- CAN FD DATA BITRATES UP TO 10 MBIT/S
- CAN BITRATES UP TO 1 MBIT/S
- CAN BUS CONNECTION VIA INDUSTRY-STANDARD D-SUB, 9-PIN MALE
- MICROCHIP MCP2558FD CAN FD TRANSCEIVER
- CAN TERMINATION AS A FACTORY OPTION
- ERROR REPORTING FOR CAN MESSAGES
- VOLTAGE SUPPLY VIA MPCIE BUS
- EXTENDED OPERATING TEMPERATURE RANGE FROM -40 TO 85°C
- ISOLATED VERSION (mPCIE-UCAN2-ISO) AS ABOVE, PLUS:
 - USING THE LATEST ISOLATION TECHNOLOGY WITH 5000V ISOLATORS
 - PER IPC-22B: 1500V ISOLATION I/O-TO-COMPUTER ON ALL SIGNALS
- ROHS AND INDUSTRIAL TEMP (-40°C TO 85°C) BOTH STANDARD

MODEL MPCIE-UCAN2



mPCIE-UCAN2-ISO shown

FUNCTIONAL DESCRIPTION

The mPCIE-UCAN2 card features two CAN ports that instantly install in most any OS as standard COM/ttyS devices.

Each port supports CAN2.0 A/B and FD operations including data rates up to 10Mbps and timestamps with 1 μ s (or 1ms) resolution.

These CAN ports can be controlled using a simple ASCII command/response interface using a superset of the popular CAN232 standard (extended to support CAN FD requirements)

The Factory “-ISO” option adds Tru-ISO™ isolation both port-to-port and port-to-PC.

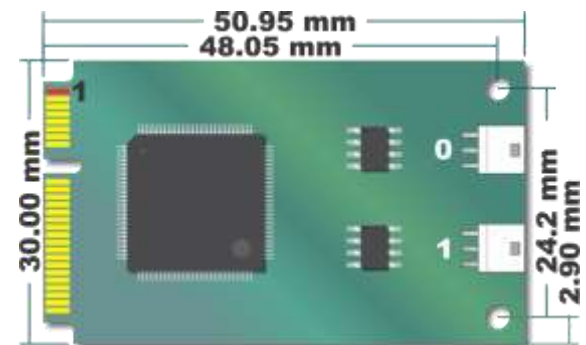
SPECIAL ORDER

Please contact ACCES with your precise requirement. Examples of special orders would be custom oscillators, conformal coating, custom software or product labelling, and more. We will work with you to provide *exactly* what is required.

ACCESSORIES

Available accessories include:

CAB-mPCIE-CAN2	Two-port DB-9 cable accessory kit
ADAP-9	DB-9 Screw Terminal Accessory
mPCIE-HDW-KIT2 & 2.5	2mm, and 2.5mm mounting hardware kits

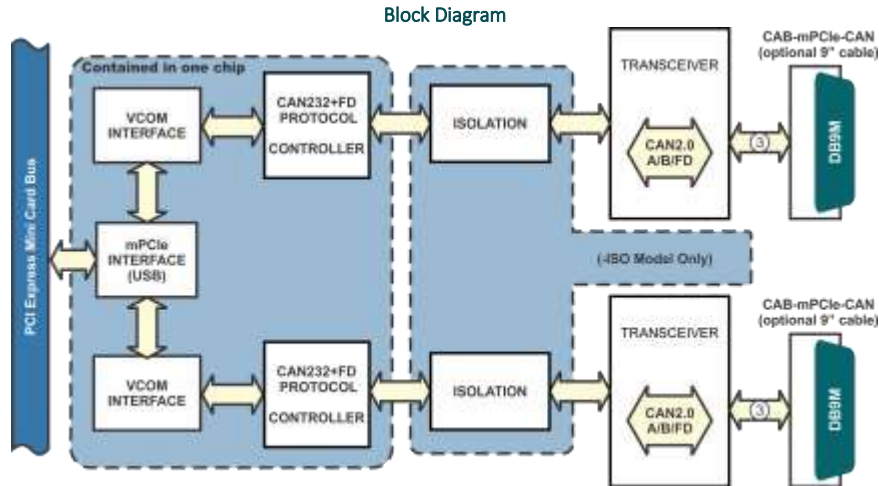


mPCIE-UCAN2 Dimension Drawing

SOFTWARE

The mPCIE-UCAN2 enumerates as a pair of standard serial COM/ttyS devices in all operating systems. Commands can be transmitted at any baud rate, 8N1, using the CAN232+FD instruction set documented here: https://accessio.com/MANUALS/CAN232FD_Reference.html. A simple demonstration program is provided, with source, to ensure quick startup.

Note: The PCI Express Mini Card bus includes USB signals, and the mPCIE-UCAN2 requires their presence. If two USB serial ports are not instantly enumerated when the card is installed please refer to your motherboard manual to ensure the USB signals are present and enabled.



PC Interface

PCI Express Mini Card Type F1 "Full Length" V1.2
(USB signaling)

Communications Interface

Connector I/O Molex 2023960307
3-pin Pico-Clasp
Mating Molex 5013300300

CAN
Protocols CAN2.0A/B/FD
with CAN232-extended interface
Transceiver Microchip MCP2558FD
Bit rates A/B 10 kbit/s - 1 Mbit/s
FD 250 kbit/s - 10 Mbit/s

Time stamp resolution 1 μ s (or 1ms)

Environmental

Temperature Operating -40° to 85°C
Storage -65° to 150°C

Humidity 5% to 95%, non-condensing

Power required mPCIe-UCAN2 +3.3VDC @ 0.25W
(typical) mPCIe-UCAN2-ISO +3.3VDC @ 0.5W

ESD Protection \pm 13kV on all signal pins
(IEC 61000)

Physical

Weight mPCIe-UCAN2 5.4 grams
-ISO 6.2 grams

Size Length 50.95mm (2.006")
Width 30.00mm (1.181")

Isolation: Tru-Iso™

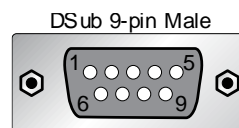
UL1577 5000V rms for 1 minute

IPC-221B Port-to-PC: 1500 V peak (AC or DC)
Port-to-port: 500 V peak (AC or DC)

Careful attention has been paid to isolation design, including extensive keep-out zones and hand-routed circuit paths, as well as component and material selection.

Pin	Signal Names	Signal Descriptions
1	CAN_L	CAN Data Low
2	CAN_H	CAN Data High
3	GND	Ground

DB-9 Male Pin	Signal Names	Signal Descriptions
1	nc	no connect
2	CAN_L	CAN Data
3	GND	Ground
4	Nc	no connect
5	Nc	no connect
6	Nc	no connect
7	CAN_H	CAN Data
8	nc	no connect
9	nc	no connect



ORDERING GUIDE

mPCIe-UCAN2 2-port Isolated RS232 PCI Express Mini Card
mPCIe-UCAN2-ISO As above, with Tru-Iso™ isolation
SHIPS STANDARD WITH INDUSTRIAL OPERATING TEMPERATURE AND ROHS