

## FEATURES

- 96 OR 48 HIGH-SIDE POWER MOSFET OUTPUTS
- TRU-ISO™ I/O-TO-PC 3.75kVRMS OPTO-ISOLATED
- 5.5" × 5.75" BOARD MATES DIRECTLY TO USB-DIO-96-OEM
- 48-OUTPUT VERSION MATES DIRECTLY TO USB-DIO-48-OEM AND ETH-DIO-48-OEM
- INDUSTRIAL OPERATING TEMPERATURE (-25°C TO +85°C) STANDARD

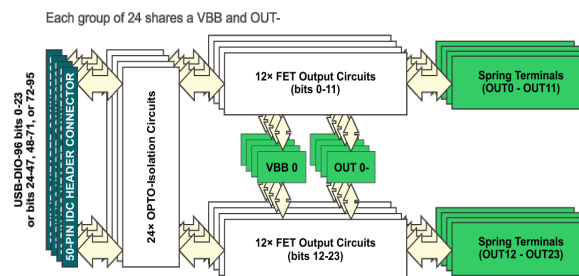
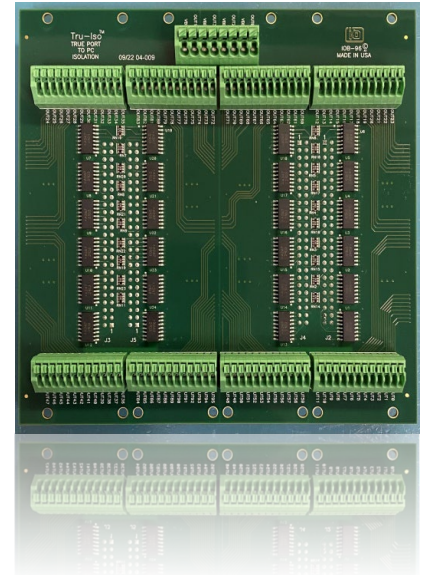
## FUNCTIONAL DESCRIPTION

The IOB-96 and IOB-48 optically isolated FET output accessory board is designed to add wide voltage and flexible current output signaling to existing TTL/CMOS DIO signals in a compact high-density accessory.

Each 24-bit group has its own FET supply voltage (Vbb) and return terminal (OUT-) for flexible isolation and signal voltages.

This handy accessory board plugs directly on top of the USB-DIO-96-OEM, USB-DIO-48-OEM, and ETH-DIO-48-OEM boards.

These cards are well suited to complex environments, mitigating otherwise challenging ground-loops, common in electrically-noisy industrial or factory locations. Easy to use spring cage terminals included for each FET output for simplified wiring in the field.



## SPECIAL ORDER

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

## SOFTWARE

No software is needed for this isolated FET accessory board.

## SPECIFICATIONS

### FET Outputs

Number	96 (or 48)
Type	High Side Power MOSFET Switch. Protected against short-circuit, over-temp, overvoltage, overload, reverse battery, ESD; drives resistive, inductive and capacitive loads.
Voltage Range	11-45VDC (customer supplied). One Vbb per 24 FETs
Current Rating	0.2A maximum, each FET
Turn On time	50 $\mu$ sec (typical)
Turn Off time	75 $\mu$ sec (typical)
Tru-Iso™ I/O-to-PC	Isolation: 3.75kVRms

**Opto-isolator per IPC-22B** 700V Isolation I/O-to-Computer on all signals

### Environmental

Temperature	Operating	-25° to +85°C
	Storage	-55° to +85°C
Humidity	90% max RH, without condensation	
Power required	+5VDC @ 450mA typical with all FETs ON	

### Physical

Size	Length	139.7mm (5.5")
	Width	146.05mm (5.75")
I/O connections	FET Outputs	Terminal Block. Phoenix 1989845; 20-24AWG
	Vbb & Rtn	Terminal Block. Phoenix 1985027; 16-24AWG
	Inputs	50-pin Female IDC headers (x4 for IOB-96, x2 for IOB-48) with OPTO/GORDOS pinout

## ORDERING GUIDE

IOB-96	Isolated FET Output Accessory, 96-channels
IOB-48	Isolated FET Output Accessory, 48-channels

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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