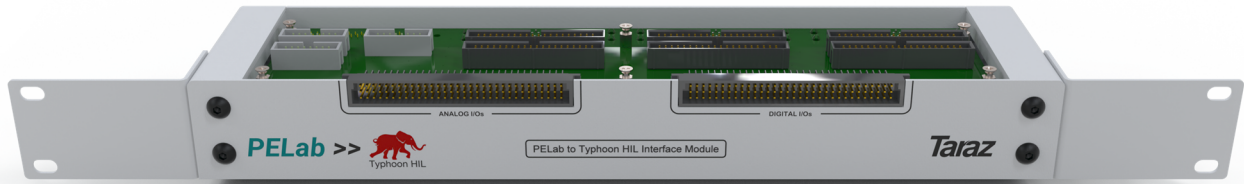


PELab-Typhoon HIL



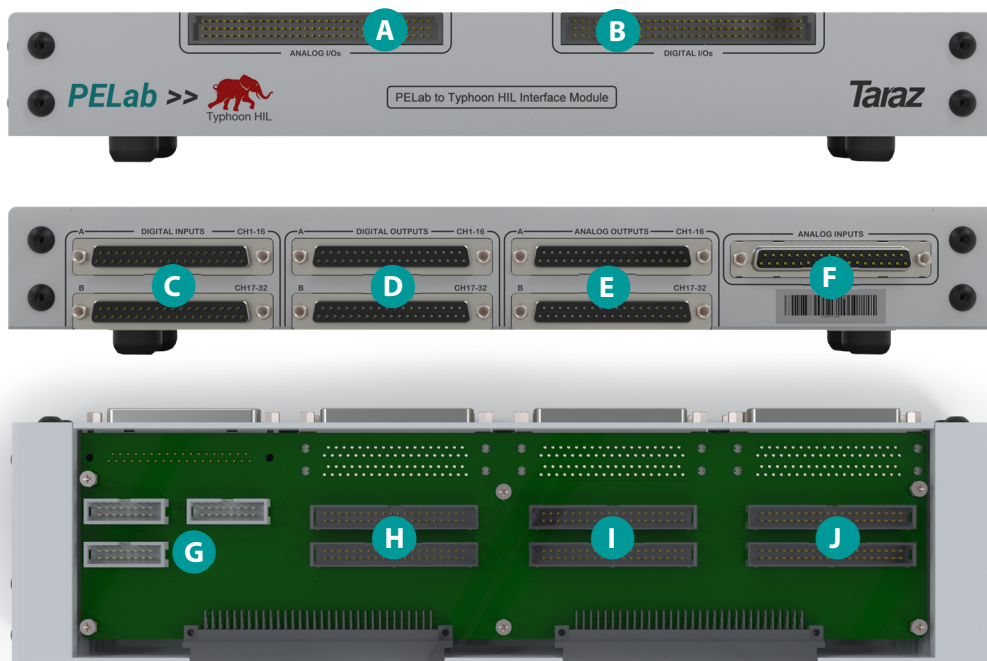
Interface Module



OVERVIEW

This product is designed to facilitate direct connection between the PELab and Typhoon HIL real-time simulators. It can also provide connectivity to Taraz Technologies other products such as the PEController and PE-RCP control cards, as well as the USM-3IV isolated voltage and current measurement module. It provides a direct connection between the Typhoon HIL 96-pin DIN41612 type connectors, the PELab DB37 connectors, the PEController/PE-RCP IDC 40-pin connectors and the USM-3IV IDC 16-pin connectors. This module can be fit on a standard 19" rack cabinet using the provided accessories or used on a desktop standalone.

CONNECTORS DESCRIPTION



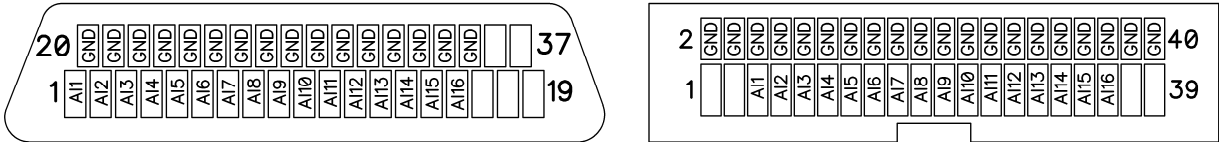
- | | |
|--|---|
| A Typhoon HIL Analog I/O Connector. | B Typhoon HIL Digital I/O Connector. |
| C DB37 Digital Input Connectors (A&B); For PELab D/O Interface. | D DB37 Digital Output Connectors (A&B); For PELab D/I Interface. |
| E DB37 Analog Output Connectors (A&B); For PELab A/I Interface. | F DB37 Analog Input Connectors (A&B); For PELab A/O Interface. |
| G USM-3IV Interface Connectors. | H IDC-40P Analog Output Connectors (A&B); For PEController/PE-RCP A/I Interface. |
| I IDC-40P Digital Output Connectors (A&B); For PEController/PE-RCP D/I Interface. | J IDC-40P Digital Input Connectors (A&B); For PEController/PE-RCP D/O Interface. |

PIN MAPPING

Due to the large number of analog output and digital input/output channels available in Typhoon HIL, each interface card can connect simultaneously to two PELabs or two PEController/PE-RCPs in addition to three USM-3IV measurement modules.

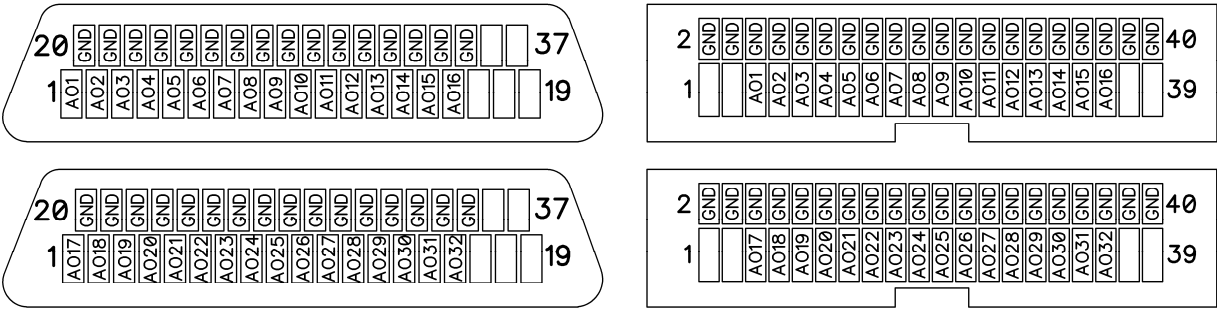
Analog

Typhoon HIL Analog Input Channels Mapping



Typhoon HIL	PELab Analog Output (DB37)	USM-3IV
AI1	CH1	USM1 i1
AI2	CH2	USM1 i2
AI3	CH3	USM1 i3
AI4	CH4	USM2 i1
AI5	CH5	USM2 i2
AI6	CH6	USM2 i3
AI7	CH7	USM3 i1
AI8	CH8	USM3 i2
AI9	CH9	USM1 V1
AI10	CH10	USM1 V2
AI11	CH11	USM1 V3
AI12	CH12	USM2 V1
AI13	CH13	USM2 V2
AI14	CH14	USM2 V3
AI15	CH15	USM3 V1
AI16	CH16	USM3 V2

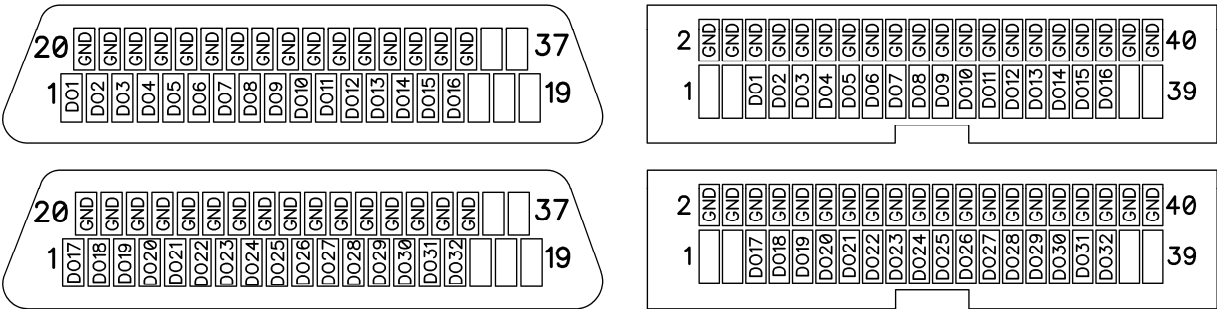
Typhoon HIL Analog Output Channels Mapping



Typhoon HIL	PELab Analog Input (DB37)		PEController / PE-RCP Analog In	
	Conn A	Conn B	Conn A	Conn B
AO1	CH1	-	CH1	-
AO2	CH2	-	CH2	-
AO3	CH3	-	CH3	-
AO4	CH4	-	CH4	-
AO5	CH5	-	CH5	-
AO6	CH6	-	CH6	-
AO7	CH7	-	CH7	-
AO8	CH8	-	CH8	-
AO9	CH9	-	CH9	-
AO10	CH10	-	CH10	-
AO11	CH11	-	CH11	-
AO12	CH12	-	CH12	-
AO13	CH13	-	CH13	-
AO14	CH14	-	CH14	-
AO15	CH15	-	CH15	-
AO16	CH16	-	CH16	-
AO17	-	CH1	-	CH1
AO18	-	CH2	-	CH2
AO19	-	CH3	-	CH3
AO20	-	CH4	-	CH4
AO21	-	CH5	-	CH5
AO22	-	CH6	-	CH6
AO23	-	CH7	-	CH7
AO24	-	CH8	-	CH8
AO25	-	CH9	-	CH9
AO26	-	CH10	-	CH10
AO27	-	CH11	-	CH11
AO28	-	CH12	-	CH12
AO29	-	CH13	-	CH13
AO30	-	CH14	-	CH14
AO31	-	CH15	-	CH15
AO32	-	CH16	-	CH16

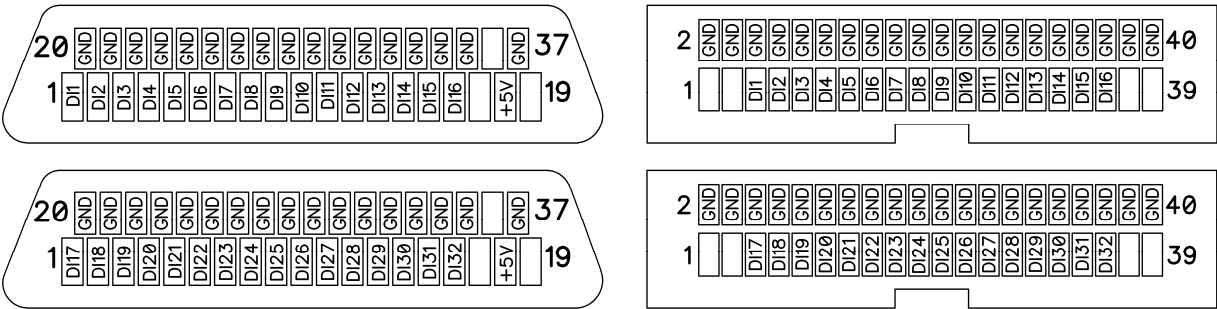
Digital

Typhoon HIL Digital Output Channels Mapping



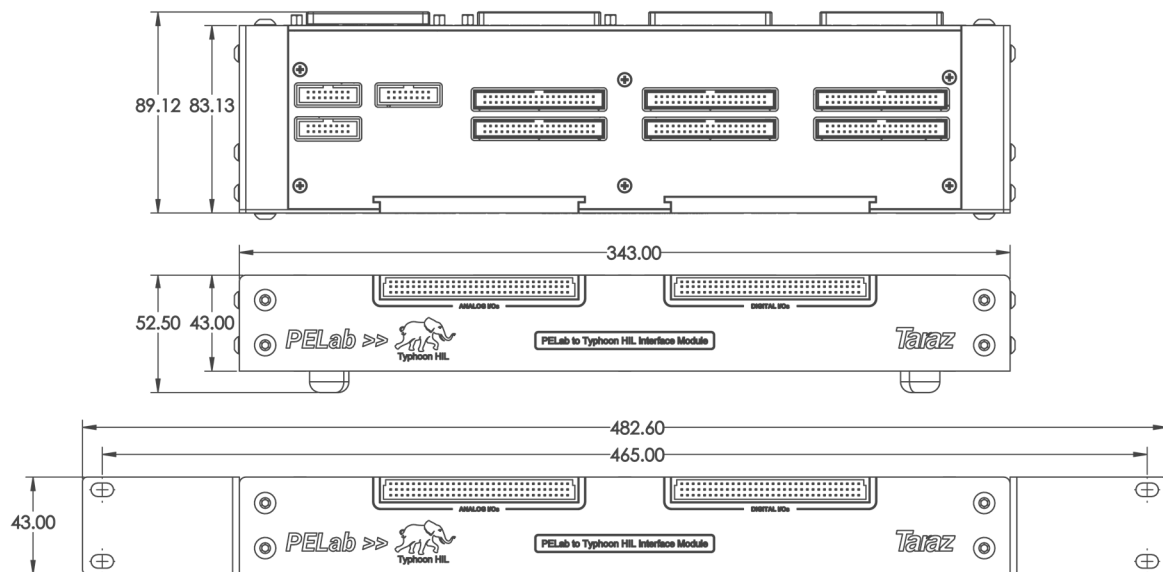
Typhoon HIL	PELab Digital Input (DB37)		PEController / PE-RCP DI	
	Conn A	Conn B	Conn A	Conn B
DO1	DI1	-	DI1	-
DO2	DI2	-	DI2	-
DO3	DI3	-	DI3	-
DO4	DI4	-	DI4	-
DO5	DI5	-	DI5	-
DO6	DI6	-	DI6	-
DO7	DI7	-	DI7	-
DO8	DI8	-	DI8	-
DO9	DI9	-	DI9	-
DO10	DI10	-	DI10	-
DO11	DI11	-	DI11	-
DO12	DI12	-	DI12	-
DO13	DI13	-	DI13	-
DO14	DI14	-	DI14	-
DO15	DI15	-	DI15	-
DO16	DI16	-	DI16	-
DO17	-	DI1	-	DI1
DO18	-	DI2	-	DI2
DO19	-	DI3	-	DI3
DO20	-	DI4	-	DI4
DO21	-	DI5	-	DI5
DO22	-	DI6	-	DI6
DO23	-	DI7	-	DI7
DO24	-	DI8	-	DI8
DO25	-	DI9	-	DI9
DO26	-	DI10	-	DI10
DO27	-	DI11	-	DI11
DO28	-	DI12	-	DI12
DO29	-	DI13	-	DI13
DO30	-	DI14	-	DI14
DO31	-	DI15	-	DI15
DO32	-	DI16	-	DI16

Typhoon HIL Digital Input Channels Mapping



Typhoon HIL	PELab Digital Input (DB37)		PEController / PE-RCP DI	
	Conn A	Conn B	Conn A	Conn B
DI1	DO1	-	DO1	-
DI2	DO2	-	DO2	-
DI3	DO3	-	DO3	-
DI4	DO4	-	DO4	-
DI5	DO5	-	DO5	-
DI6	DO6	-	DO6	-
DI7	DO7	-	DO7	-
DI8	DO8	-	DO8	-
DI9	DO9	-	DO9	-
DI10	DO10	-	DO10	-
DI11	DO11	-	DO11	-
DI12	DO12	-	DO12	-
DI13	DO13	-	DO13	-
DI14	DO14	-	DO14	-
DI15	DO15	-	DO15	-
DI16	DO16	-	DO16	-
DI17	-	DO1	-	DO1
DI18	-	DO2	-	DO2
DI19	-	DO3	-	DO3
DI20	-	DO4	-	DO4
DI21	-	DO5	-	DO5
DI22	-	DO6	-	DO6
DI23	-	DO7	-	DO7
DI24	-	DO8	-	DO8
DI25	-	DO9	-	DO9
DI26	-	DO10	-	DO10
DI27	-	DO11	-	DO11
DI28	-	DO12	-	DO12
DI29	-	DO13	-	DO13
DI30	-	DO14	-	DO14
DI31	-	DO15	-	DO15
DI32	-	DO16	-	DO16

MECHANICAL



* Note: All dimensions in mm.

ABOUT TARAZ TECHNOLOGIES

Taraz Technologies has been providing research-oriented power electronics solutions to customers in more than 30 countries. Our products include DC/DC Converters, Gate Drivers, Power Modules, Embedded Controllers, Isolated Sensors, Smart Probes, Data Acquisition devices as well as fully integrated Power Electronics Systems. Our product design philosophy focuses on easy-to-use, research-friendly, and modular solutions that can accelerate the research and development cycle while providing maximum versatility for research. Furthermore, our finished product portfolio includes Programmable Power Supplies and Solar Inverters for the domestic market.

Founded in 2012, Taraz was nominated among the top most innovative technology startups in Pakistan. Our research and manufacturing facility is located in Islamabad, the green capital city of Pakistan.

TARAZ WARRANTY

Taraz Technologies warrants its Products against defects in material, workmanship, and design for a period of twelve (12) months. The defective Products will be repaired or replaced, free of charge, as per our standard terms and conditions. For more information on warranty and terms, please visit our website at www.taraztechnologies.com.

SAFETY NOTICE

This Device is ESD Sensitive and Needs to be Handled with Care. High Voltage Condition May Occur During Operation of the Device, and Hence User is Solely Responsible for Equipment and Personnel Safety. Taraz Technologies Shall Not be Hold Liable for any Damage to Personnel and/or Properties as a Result of Using this Device. User Must Take Adequate Steps to Ensure Electrical and Mechanical Safety of the Device in Use.

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