

SET-RTI

Rear Transition Interface

Model	NI Part Number	Description
RTI-12302	751525-01	DIO 64 – 2x VHDC
RTI-12303	751524-01	Universal 32 – 4x Nano-Fit
RTI-12304	751438-01	Universal 32 – DIO 37 SUB
RTI-12305	751526-01	Universal 32 – HD44
RTI-12344	785376-01	For AO 37 DSUB

This document 9040TDD8000 is a technical description of the SET-RTI.



Note

Before you begin, complete the software and hardware installation procedures applicable to your application.



Note

The guidelines in this document are specific to the SET-RTI. The other components in the system might not meet the same safety ratings. Refer to the documentation of each component in the system to determine the safety and EMC ratings for the entire system.

MORE INFORMATION ON OUR WEBSITE:

www.smart-e-tech.com/slsc

Safety Guidelines



Caution Do not operate the SET RTI's in a manner not specified in this document. Product misuse can result in a hazard. You can compromise the safety protection built into the product if the product is damaged in any way. If the product is damaged, return it for repair.



Caution Do not install the RTI into a SLSC-Chassis when the module is obviously damaged.



Caution The module is designed for laboratory use. Installing or operating the module in explosive or hazardous environments is not permissible and may result in serious injury or **death!** In case of fire, a normal CO_2 or a dry-chemical fire extinguisher can be used.



Caution The module is not designed to isolate voltage levels of more than 60 VDC. Do not exceed the voltage levels according to the technical specifications. Not following this instruction may result in module damage and serious injury or **death!** Disconnect and lock out power before servicing.



Caution Warning of sharp or pointed objects.



Caution Warning of damaged cables and isolation, this could affect electrical damage.

Electromagnetic Compatibility Guidelines

This product was tested and complies with the regulatory requirements and limits for electromagnetic compatibility (EMC). These requirements and limits provide reasonable protection against harmful interference when the product is operated in the intended operational electromagnetic environment.

This product is intended for use in industrial locations. However, harmful interference may occur in some installations, when the product is connected to a peripheral device or test object, or if the product is used in residential or commercial areas. To minimize interference with radio and television reception and prevent unacceptable performance degradation, install, and use this product in strict accordance with the instructions in the product documentation.

Furthermore, any changes or modifications to the product not expressly approved by SET GmbH could void your authority to operate it under your local regulatory rules.



Caution To ensure the specified EMC performance, operate this product only with shielded cables and accessories.

SLSC Introduction

The Switch Load and Signal Conditioning (SLSC) is a platform from National Instruments to standardize the “last mile” between the Measurement Device and the Device under Test (DUT) in Hardware and Software.

At the back of ta SLSC chassis, screw mounted Rear Transition Interfaces (RTI's) contact the signal connector of the SLSC card and transfer the signals to several hardware of National Instruments. At the back of the RTI are in turn other plugs for the transmission of the signals.



The RTI modules can either be used to contact the SLSC car directly with common NI standard components of the PXI or cRIO platform or for the division of the signals to standard plug connectors suitable for industrial use. In the former case, the corresponding Hardware connection, can be with a one-to-one cable, whereas in the second case, the NI Hardware or other manufacturer Hardware connection can be with adapter cables. If a NI Hardware requires multiple signal conditioning, such a RTI can be used together with a Y-cable.



These RTI's products includes all cables as well as any needed mechanical equipment. On the Software side, a consistent NI LabVIEW API is provided to offer uniform detection and control of the signal conditioning and switching cards.

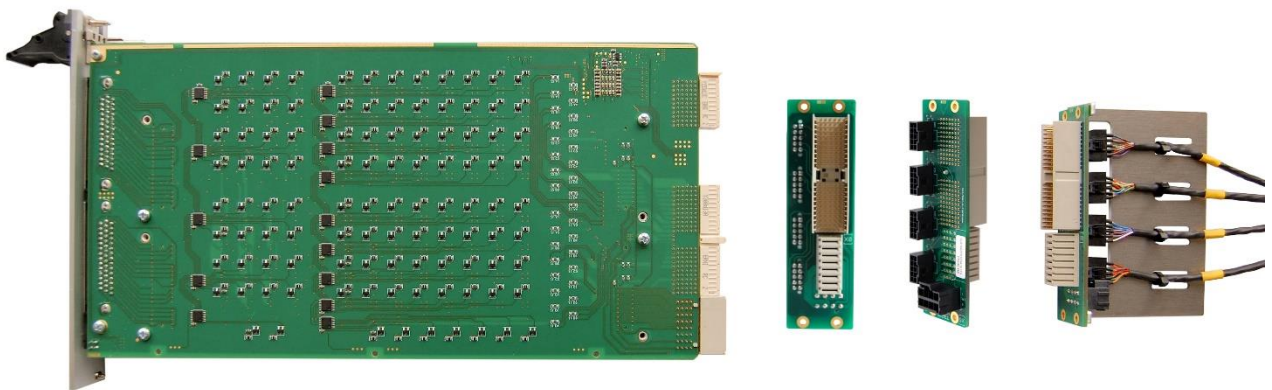
The SET GmbH is continuously working on the development of new RTI's. If you don't find the appropriate RTI for your application, we will be glad to help you, from the delivery of a particular cable to the development of a user specific RTI.

National Instruments as well as different partners offer a wide variety of different signal conditioning cards to interface DUTs. The platform is designed to allow effective development of additional cards in terms of cost and time.

Module Overview

Rear Transition Interfaces are mounted at the rear side of the SLSC chassis as part of the backplane. The RTIs contact the signal- and power connector of the SLSC card and provide a powerful and flexible solution to connect a wide range of industrial measurement equipment.

The connectors and pinouts are designed to match the National Instruments (NI) standard. For this there is a wide choice of cables to connect the SLSC and the National Instruments (NI) measurement units.



This standardization makes it easy to connect a SLSC card to a PXI or cRIO module. The system works with standard components, so it is possible to connect the system via plug and play.

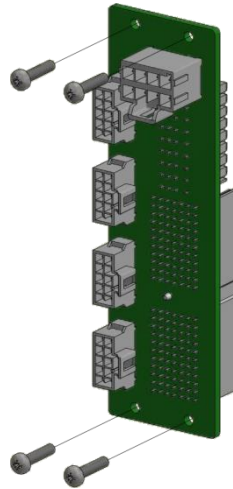
It is also possible to connect one SLSC card to another SLSC card, this allows two or more steps of signal conditioning in one line.

The SLSC System is a flexible solution and not limited to one manufacturer of measurement equipment.

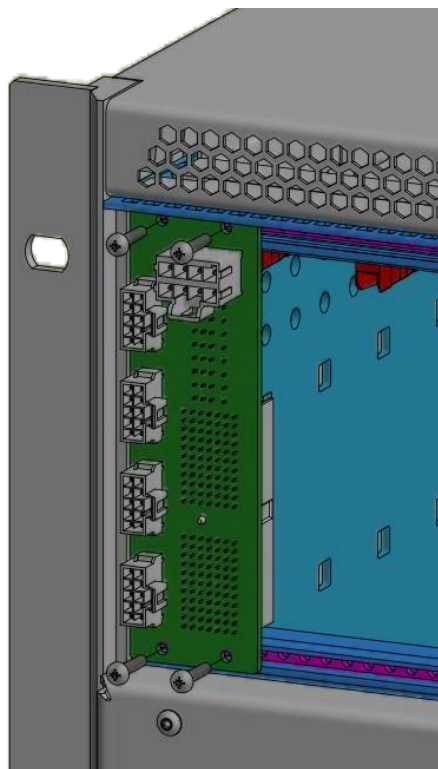
The SET GmbH is continuously working on the development of new RTIs. If you do not find the appropriate RTI for your application, we will be glad to help you, from the delivery of a particular cable to the development of a user specific RTI.

Mounting the RTI into the Chassis

Mounting the RTI into the Chassis



Screws: M2,5x10/SHR-LIKPF-DIN7985-4.8-H1



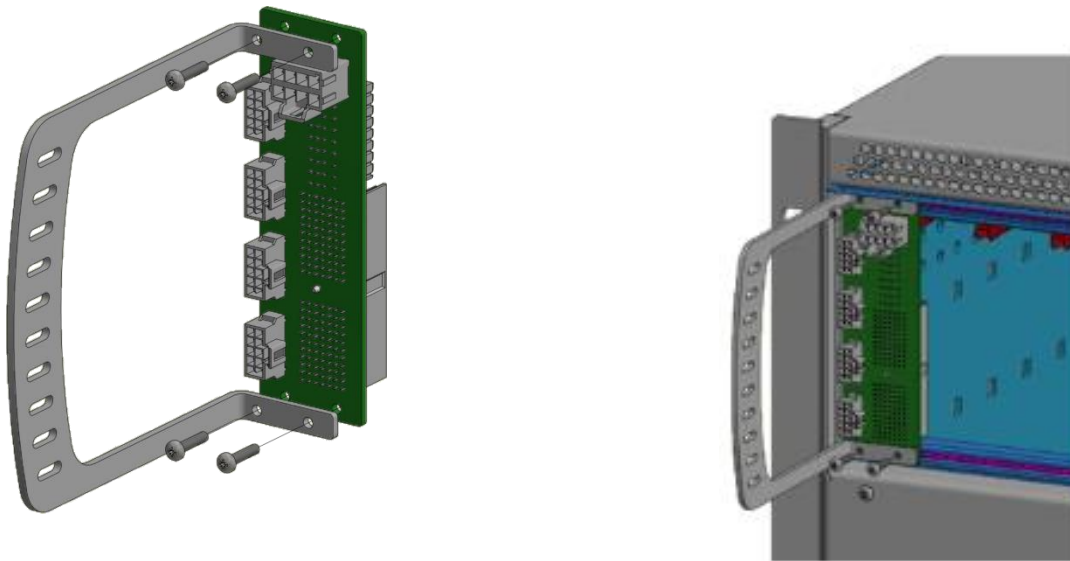
Mounting the RTI into the Chassis using SET Strain-Relief.

Only use the original SET Strain-Relief.

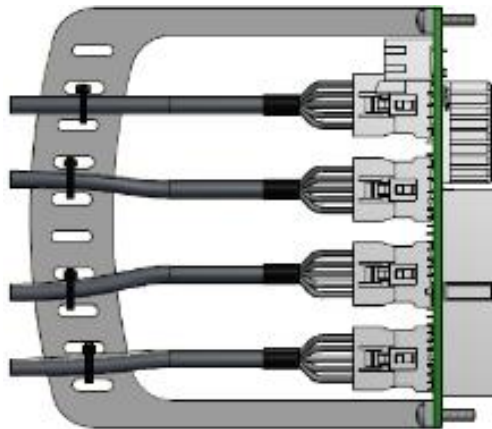
To make the RTI and Strain-Relief ready for use, mount them on the correct slot of the SLSC Chassis with the provided screws.

Afterwards plug the cables into the RTI connectors and fix the cables at the Strain-Relief with cable ties.

If all connections are complete, plug in the SLSC card.



Screws: M2,5x10/SHR-LIKPF-DIN7985-4.8-H1

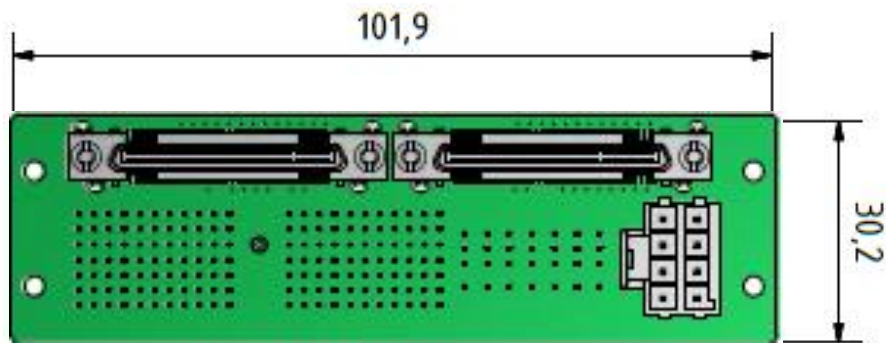


Environmental Conditions

- Temperature Range: 0°C-80°C
- Humidity: 10%-90% relative, non-condensing
- Operation altitude: < 2000 m

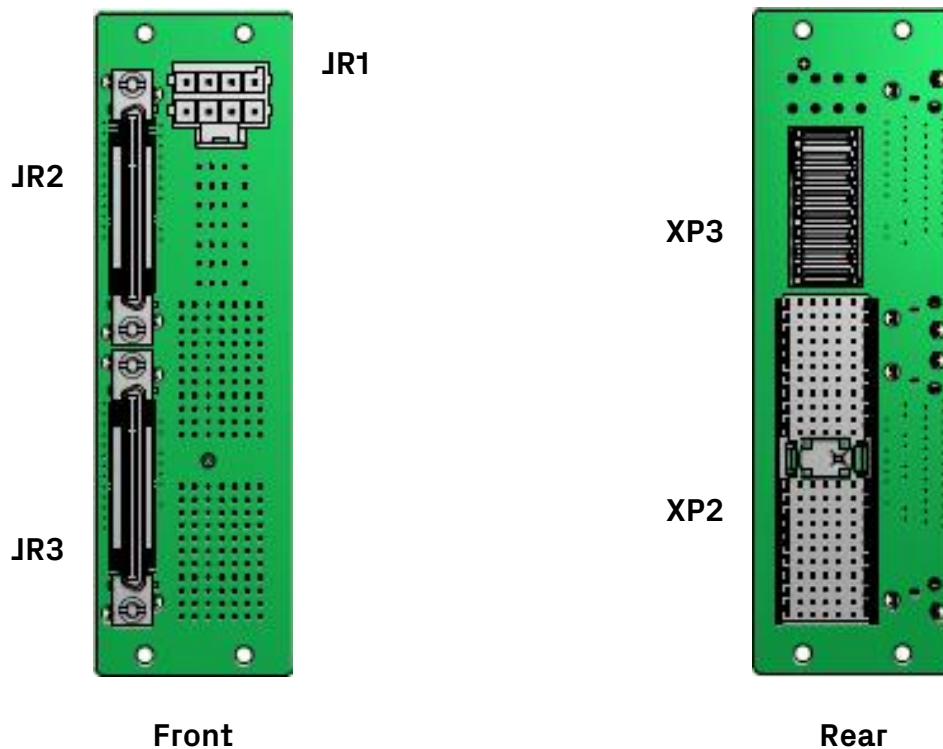
Dimensions

- SET RTI dimensions
- Dimensions: appr. 101.9 mm x 30.2 mm 10%-90% relative, non-condensing



RTI-12302

DIO 64 – 2x VHDCI



XP2

Voltage

max: 30 V_{DC} to ground or to another contact within the connector

Current

max: 0.3 A per contact at 30°C ambient temperature

XP3

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR1

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR2-JR3

Voltage

max. 30 V_{DC} to ground or to another contact within the connector

Current

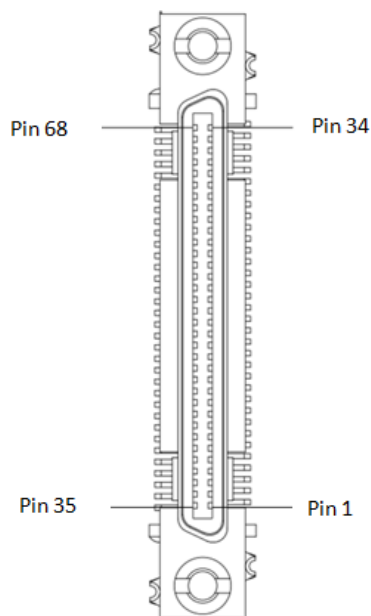
max: 0.3 A per contact at 30°C ambient temperature

Dimensions

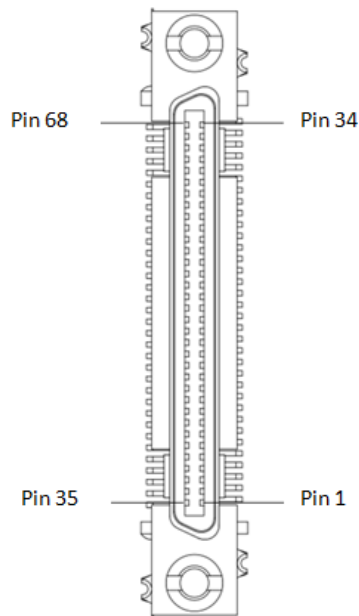
SET RTI DIMENSIONS 101.9 mm x 30.2 mm

RTI-12302

JR2 Pinout



JR3 Pinout



JR2

Pin	RTI Signal	Pin	RTI Signal	Pin	RTI Signal	Pin	RTI Signal
1	P0.31	18	GND	35	P0.30	52	GND
2	GND	19	P0.13	36	GND	53	P0.12
3	P0.29	20	GND	37	P0.28	54	GND
4	GND	21	P0.11	38	GND	55	P0.10
5	P0.27	22	GND	39	P0.26	56	GND
6	GND	23	P0.9	40	GND	57	P0.8
7	P0.25	24	GND	41	P0.24	58	GND
8	GND	25	P0.7	42	GND	59	P0.6
9	P0.23	26	GND	43	P0.22	60	GND
10	GND	27	P0.5	44	GND	61	P0.4
11	P0.21	28	GND	45	P0.20	62	GND
12	GND	29	P0.3	46	GND	63	P0.2
13	P0.19	30	GND	47	P0.18	64	GND
14	GND	31	P0.1	48	GND	65	P0.0
15	P0.17	32	GND	49	P0.16	66	GND
16	GND	33	GND	50	GND	67	NC
17	P0.15	34	GND	51	P0.14	68	GND

Table A1. JR2 Pinout

RTI-12302

JR3

Pin	RTI Signal	Pin	RTI Signal	Pin	RTI Signal	Pin	RTI Signal
1	P0.63	18	GND	35	P0.62	52	GND
2	GND	19	P0.45	36	GND	53	P0.44
3	P0.61	20	GND	37	P0.60	54	GND
4	GND	21	P0.43	38	GND	55	P0.42
5	P0.59	22	GND	39	P0.58	56	GND
6	GND	23	P0.41	40	GND	57	P0.40
7	P0.57	24	GND	41	P0.56	58	GND
8	GND	25	P0.39	42	GND	59	P0.38
9	P0.55	26	GND	43	P0.54	60	GND
10	GND	27	P0.37	44	GND	61	P0.36
11	P0.53	28	GND	45	P0.52	62	GND
12	GND	29	P0.35	46	GND	63	P0.34
13	P0.51	30	GND	47	P0.50	64	GND
14	GND	31	P0.33	48	GND	65	P0.32
15	P0.49	32	GND	49	P0.48	66	GND
16	GND	33	GND	50	GND	67	NC
17	P0.47	34	GND	51	P0.46	68	GND

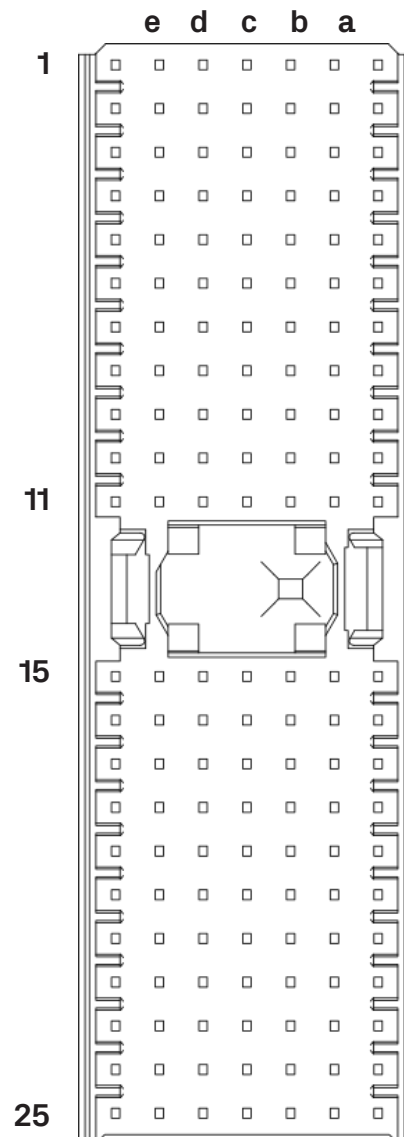
Table A2. JR3 Pinout

Signal	Description
Px.y	Line y in Port x
GND	Ground connection
NC	No connection

Table A3. JR2, JR3 Connector Pin Assignments

RTI-12302

XP2 Connector Pinout



RTI-12302

Row	a	b	c	d	e
1	P0.0	P0.1	NC	P0.2	P0.3
2	P0.4	P0.5	NC	P0.6	P0.7
3	GND	GND	GND	GND	GND
4	P0.8	P0.9	NC	P0.10	P0.11
5	P0.12	P0.13	NC	P0.14	P0.15
6	GND	GND	GND	GND	GND
7	P0.16	P0.17	NC	P0.18	P0.19
8	P0.20	P0.21	NC	P0.22	P0.23
9	GND	GND	GND	GND	GND
10	P0.24	P0.25	NC	P0.26	P0.27
11	P0.28	P0.29	NC	P0.30	P0.31
15	P0.32	P0.33	NC	P0.34	P0.35
16	P0.36	P0.37	NC	P0.38	P0.39
17	GND	GND	GND	GND	GND
18	P0.40	P0.41	NC	P0.42	P0.43
19	P0.44	P0.45	NC	P0.46	P0.47
20	GND	GND	GND	GND	GND
21	P0.48	P0.49	NC	P0.50	P0.51
22	P0.52	P0.53	NC	P0.54	P0.55
23	GND	GND	GND	GND	GND
24	P0.56	P0.57	NC	P0.58	P0.59
25	P0.60	P0.61	NC	P0.62	P0.63

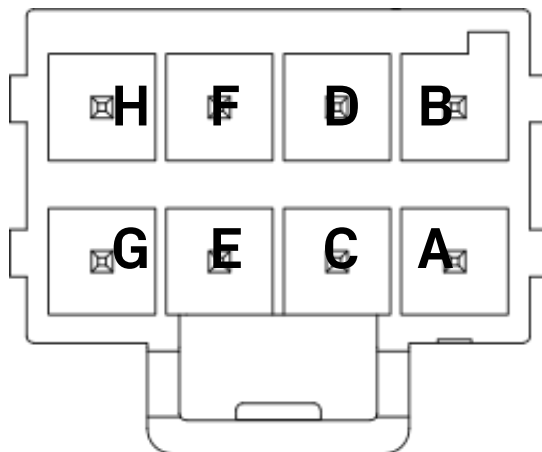
Table A4. XP2 Connector Pin Assignments

Signal	Description
Px.y	Universal connection
GND	Ground connection
NC	No connection
Row f,z	Shield

Table A5. XP2 Connector Signal Descriptions

RTI-12302

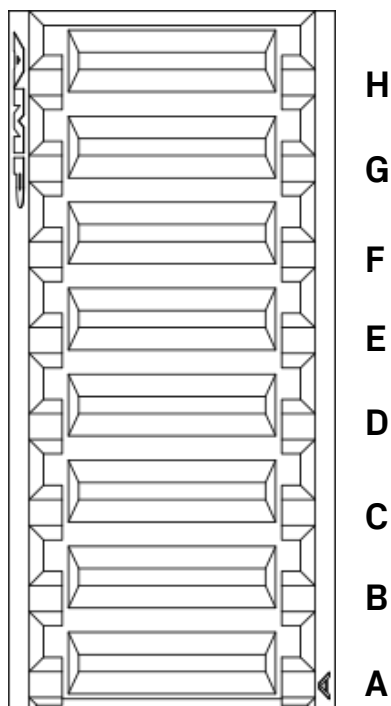
JR1 Connector Pinout



Signal	JR1 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

Table A6. JR1 Connector Signal Descriptions

XP3 Connector Pinout



Signal	XP3 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

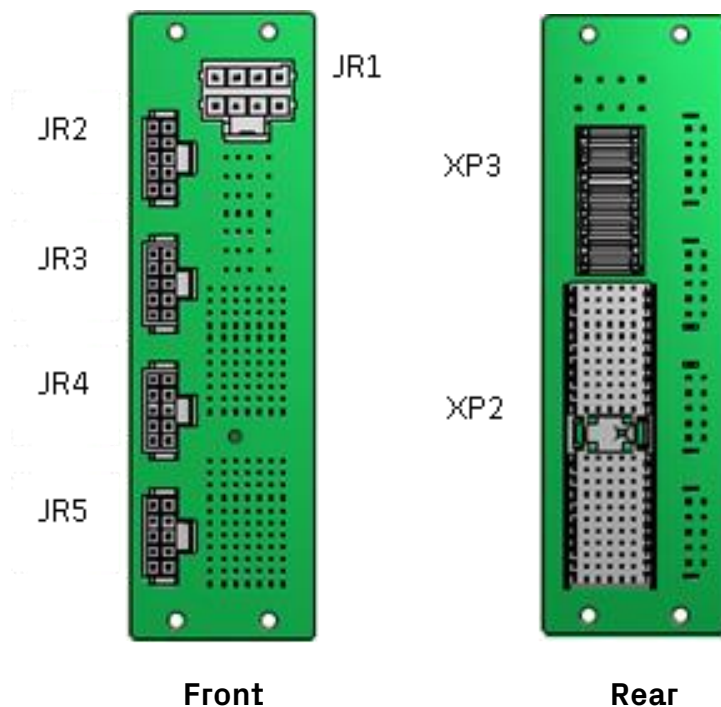
Table A7. XP3 Connector Signal Descriptions

RTI-12302 Overview



RTI-12303

Universal 32 – 4X Nano-Fit™



XP2

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 1.4 A per contact at 30°C ambient temperature

XP3

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR1

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR2-JR5

Voltage

max. 60 V_{DC} to ground or to another contact within the connector

Current

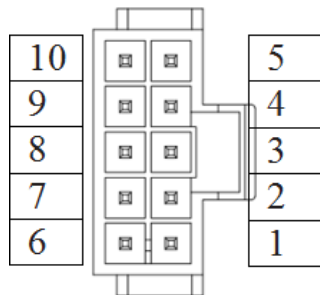
max: 1.4 A per contact at 30°C ambient temperature

Dimensions

SET RTI DIMENSIONS 101.9 mm x 30.2 mm

RTI-12303

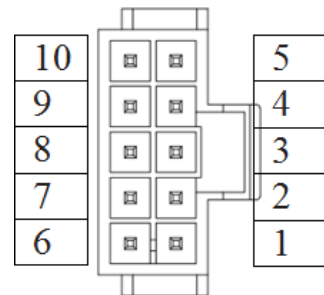
JR2 Pinout



Pin	RTI Signal	Pin	RTI Signal
1	P0.7	6	P0.6
2	P0.5	7	P0.4
3	GND	8	GND
4	P0.3	9	P0.2
5	P0.1	10	P0.0

Table B1. JR2 Pinout

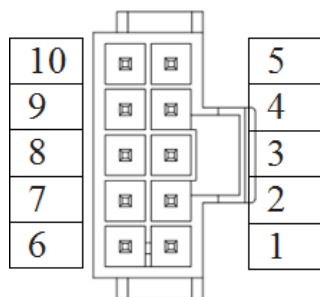
JR3 Pinout



Pin	RTI Signal	Pin	RTI Signal
1	P1.7	6	P1.6
2	P1.5	7	P1.4
3	GND	8	GND
4	P1.3	9	P1.2
5	P1.1	10	P1.2

Table B2. JR3 Pinout

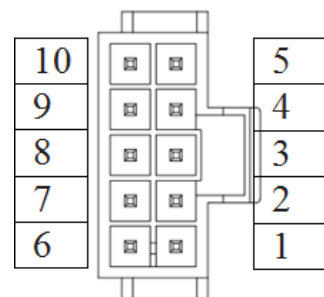
JR4 Pinout



Pin	RTI Signal	Pin	RTI Signal
1	P2.7	6	P2.6
2	P2.5	7	P2.4
3	GND	8	GND
4	P2.3	9	P2.2
5	P2.1	10	P2.0

Table B3. JR2 Pinout

JR5 Pinout



Pin	RTI Signal	Pin	RTI Signal
1	P3.7	6	P3.6
2	P3.5	7	P3.4
3	GND	8	GND
4	P3.3	9	P3.2
5	P3.1	10	P3.2

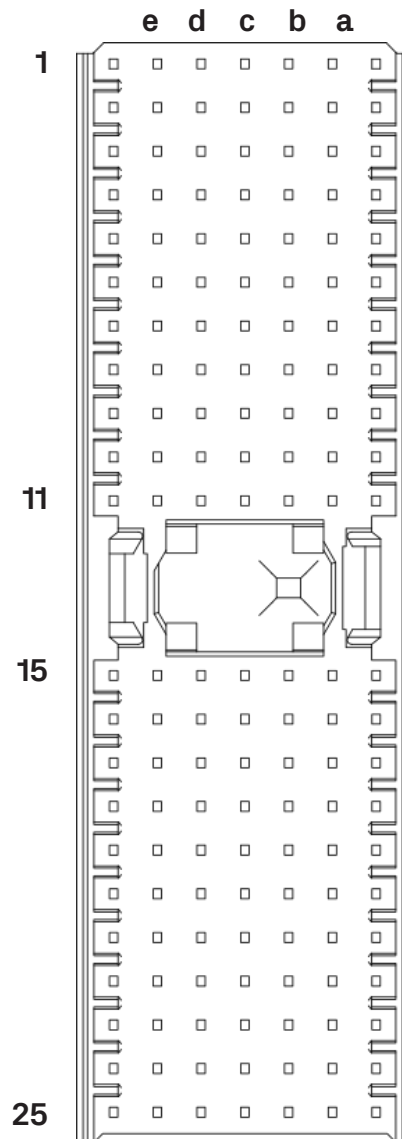
Table B4. JR2 Pinout

Signal	Description
Px.y	Line y in Port x
GND	Ground connection
NC	No connection

Table B5. JR2, JR3, JR4, JR5 Connector Pin Assignments

RTI-12303

XP2 Connector Pinout



RTI-12303

Row	a	b	c	d	e
1	P0.0	P0.1	NC	P0.2	P0.3
2	P0.4	P0.5	NC	P0.6	P0.7
3	GND	GND	GND	GND	GND
4	P0.8	P0.9	NC	P0.10	P0.11
5	P0.12	P0.13	NC	P0.14	P0.15
6	GND	GND	GND	GND	GND
7	P0.16	P0.17	NC	P0.18	P0.19
8	P0.20	P0.21	NC	P0.22	P0.23
9	GND	GND	GND	GND	GND
10	P0.24	P0.25	NC	P0.26	P0.27
11	P0.28	P0.29	NC	P0.30	P0.31
15	P0.32	P0.33	NC	P0.34	P0.35
16	P0.36	P0.37	NC	P0.38	P0.39
17	GND	GND	GND	GND	GND
18	P0.40	P0.41	NC	P0.42	P0.43
19	P0.44	P0.45	NC	P0.46	P0.47
20	GND	GND	GND	GND	GND
21	P0.48	P0.49	NC	P0.50	P0.51
22	P0.52	P0.53	NC	P0.54	P0.55
23	GND	GND	GND	GND	GND
24	P0.56	P0.57	NC	P0.58	P0.59
25	P0.60	P0.61	NC	P0.62	P0.63

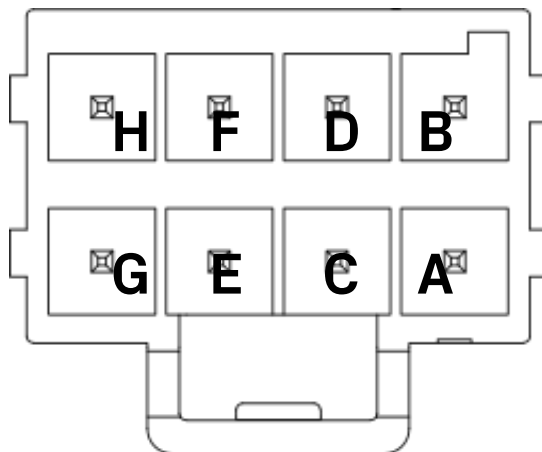
Table B6. XP2 Connector Pin Assignments

Signal	Description
Px.y	Universal connection
GND	Ground connection
NC	No connection
Row f,z	Shield

Table B7. XP2 Connector Signal Descriptions

RTI-12303

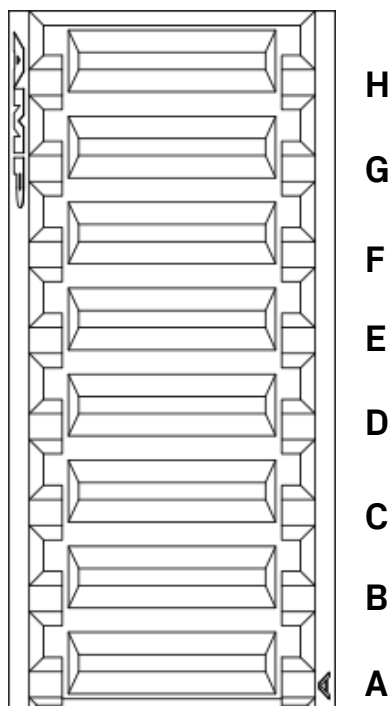
JR1 Connector Pinout



Signal	JR1 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

Table B8. JR1 Connector Signal Descriptions

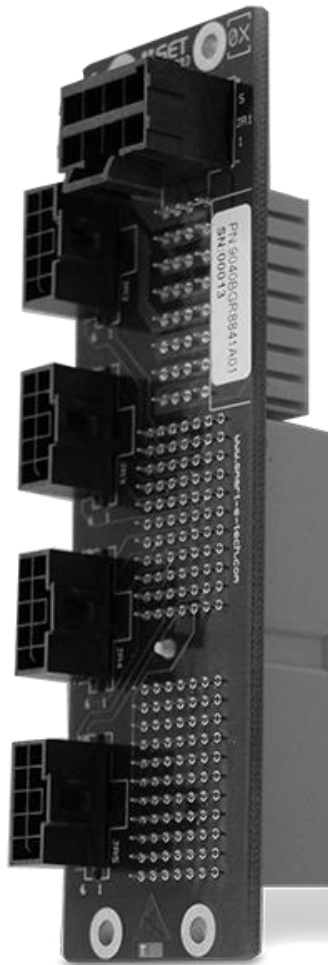
XP3 Connector Pinout



Signal	XP3 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

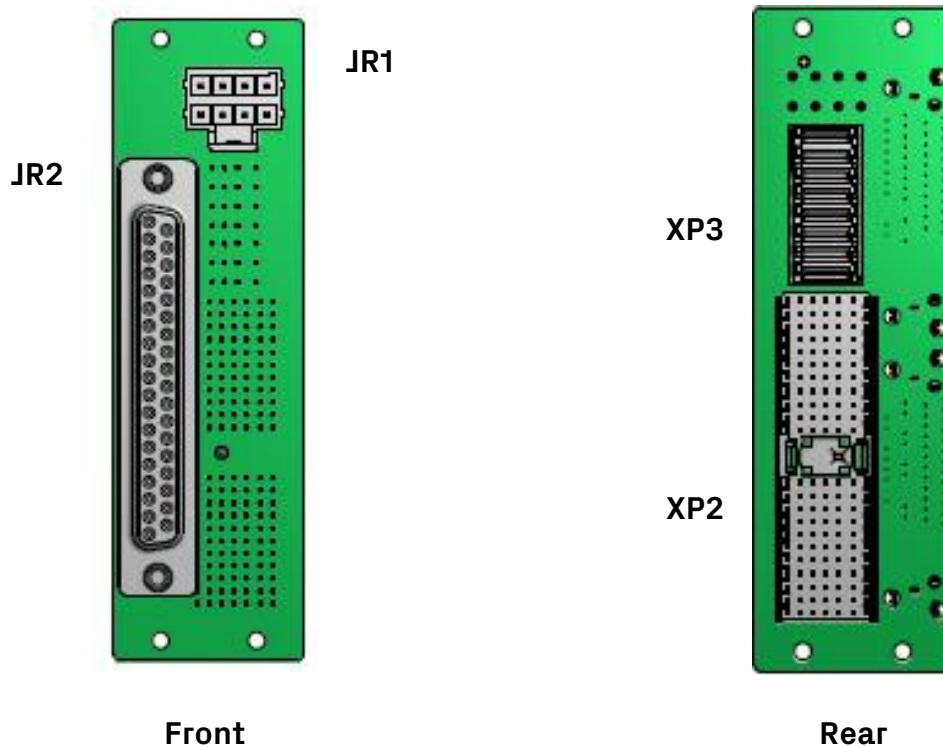
Table B9. XP3 Connector Signal Descriptions

RTI-12303 Overview



RTI-12304

Universal-32-DIO 37SUB



XP2

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 0.5 A per contact at 30°C ambient temperature

XP3

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR1

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR2-JR5

Voltage

max. 60 V_{DC} to ground or to another contact within the connector

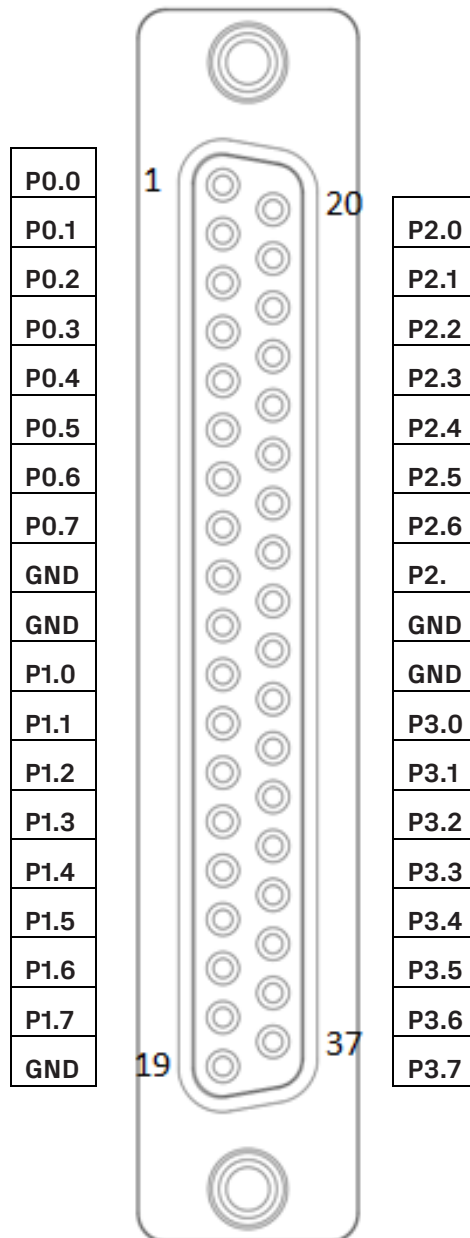
Current

max: 0.5 A per contact at 30°C ambient temperature

Dimensions

SET RTI DIMENSIONS 101.9 mm x 30.2 mm

JR2 Pinout

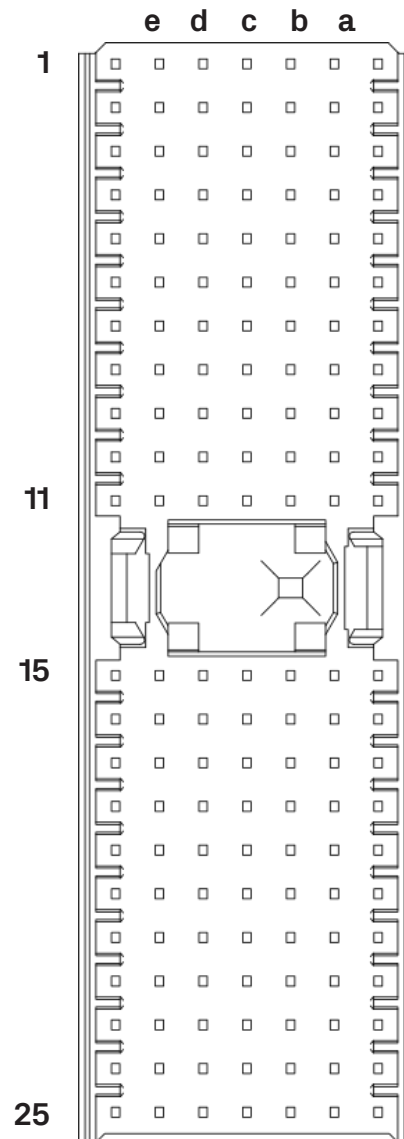


Signal	Description
Px.y	Line y in Port x
GND	Ground connection
NC	No connection

Table C1. JR2 Connector Pin Assignments

RTI-12304

XP2 Connector Pinout



RTI-12304

Row	a	b	c	d	e
1	P0.0	P0.1	NC	P0.2	P0.3
2	P0.4	P0.5	NC	P0.6	P0.7
3	GND	GND	GND	GND	GND
4	P0.8	P0.9	NC	P0.10	P0.11
5	P0.12	P0.13	NC	P0.14	P0.15
6	GND	GND	GND	GND	GND
7	P0.16	P0.17	NC	P0.18	P0.19
8	P0.20	P0.21	NC	P0.22	P0.23
9	GND	GND	GND	GND	GND
10	P0.24	P0.25	NC	P0.26	P0.27
11	P0.28	P0.29	NC	P0.30	P0.31
15	P0.32	P0.33	NC	P0.34	P0.35
16	P0.36	P0.37	NC	P0.38	P0.39
17	GND	GND	GND	GND	GND
18	P0.40	P0.41	NC	P0.42	P0.43
19	P0.44	P0.45	NC	P0.46	P0.47
20	GND	GND	GND	GND	GND
21	P0.48	P0.49	NC	P0.50	P0.51
22	P0.52	P0.53	NC	P0.54	P0.55
23	GND	GND	GND	GND	GND
24	P0.56	P0.57	NC	P0.58	P0.59
25	P0.60	P0.61	NC	P0.62	P0.63

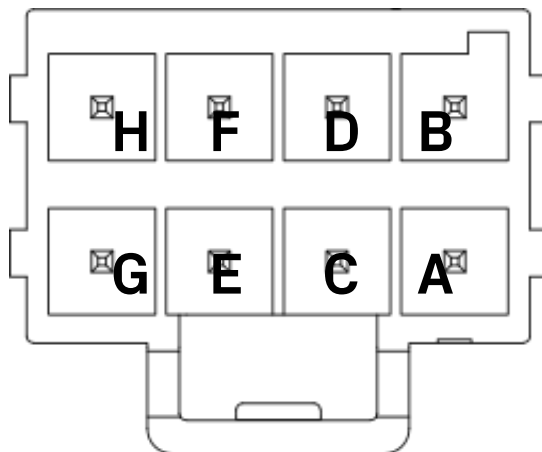
Table C2. XP2 Connector Pin Assignments

Signal	Description
Px.y	Universal connection
GND	Ground connection
NC	No connection
Row f,z	Shield

Table C3. XP2 Connector Signal Descriptions

RTI-12304

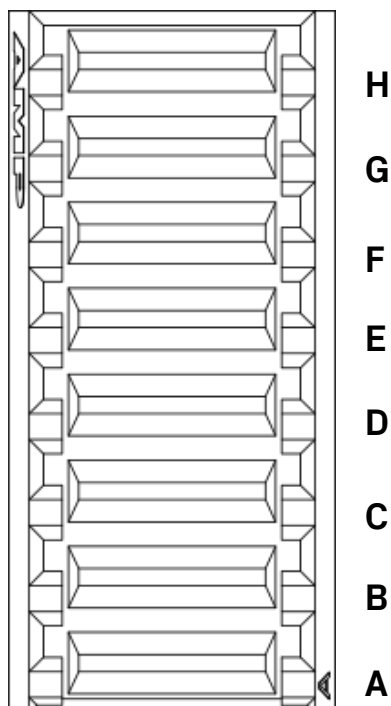
JR1 Connector Pinout



Signal	JR1 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

Table C4. JR1 Connector Signal Descriptions

XP3 Connector Pinout

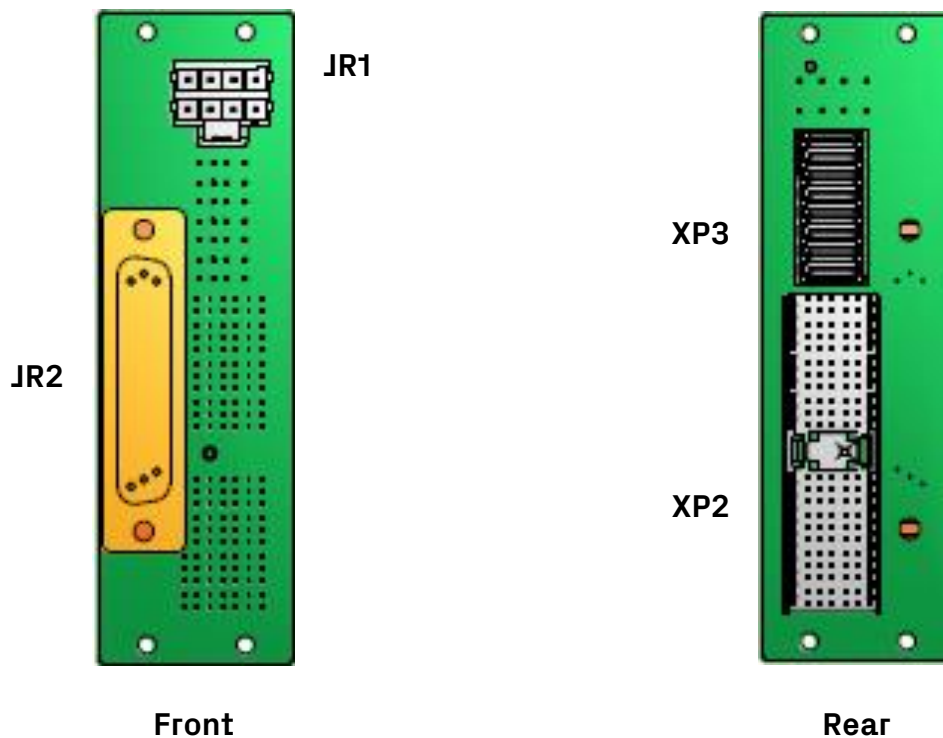


Signal	XP3 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

Table C5. XP3 Connector Signal Descriptions

RTI-12305

Universal-32 – HD44



XP2

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 1.4 A per contact at 30°C ambient temperature

XP3

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR1

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR2-JR5

Voltage

max. 60 V_{DC} to ground or to another contact within the connector

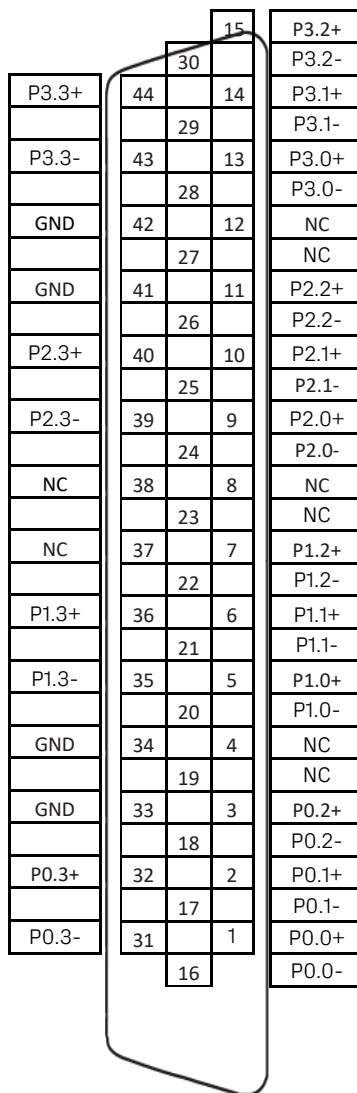
Current

max: 1.4 A per contact at 30°C ambient temperature

Dimensions

SET RTI DIMENSIONS 101.9 mm x 30.2 mm

JR2 Pinout

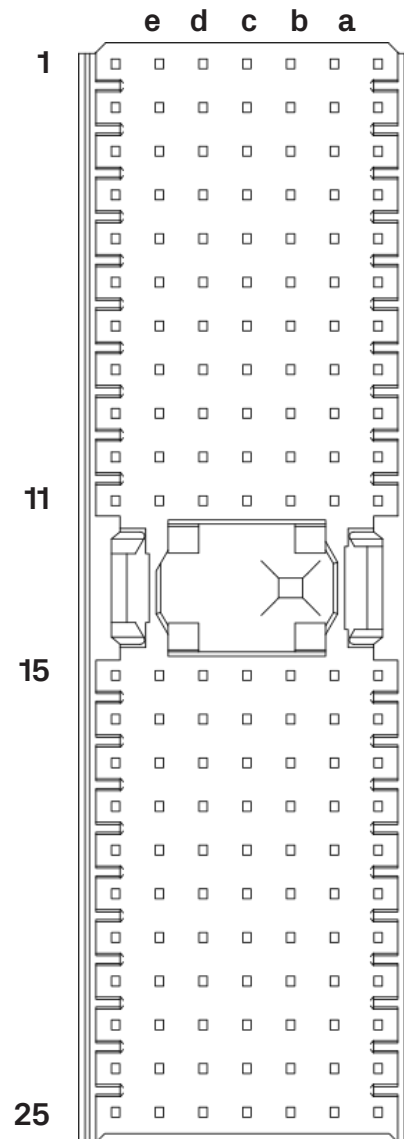


Signal	Description
Px.y	Line y in Port x
GND	Ground connection
NC	No connection

Table D1. JR2 Connector Pin Assignments

RTI-12305

XP2 Connector Pinout



RTI-12305

Row	a	b	c	d	e
1	P0.0	P0.1	NC	P0.2	P0.3
2	P0.4	P0.5	NC	P0.6	P0.7
3	GND	GND	GND	GND	GND
4	P0.8	P0.9	NC	P0.10	P0.11
5	P0.12	P0.13	NC	P0.14	P0.15
6	GND	GND	GND	GND	GND
7	P0.16	P0.17	NC	P0.18	P0.19
8	P0.20	P0.21	NC	P0.22	P0.23
9	GND	GND	GND	GND	GND
10	P0.24	P0.25	NC	P0.26	P0.27
11	P0.28	P0.29	NC	P0.30	P0.31
15	P0.32	P0.33	NC	P0.34	P0.35
16	P0.36	P0.37	NC	P0.38	P0.39
17	GND	GND	GND	GND	GND
18	P0.40	P0.41	NC	P0.42	P0.43
19	P0.44	P0.45	NC	P0.46	P0.47
20	GND	GND	GND	GND	GND
21	P0.48	P0.49	NC	P0.50	P0.51
22	P0.52	P0.53	NC	P0.54	P0.55
23	GND	GND	GND	GND	GND
24	P0.56	P0.57	NC	P0.58	P0.59
25	P0.60	P0.61	NC	P0.62	P0.63

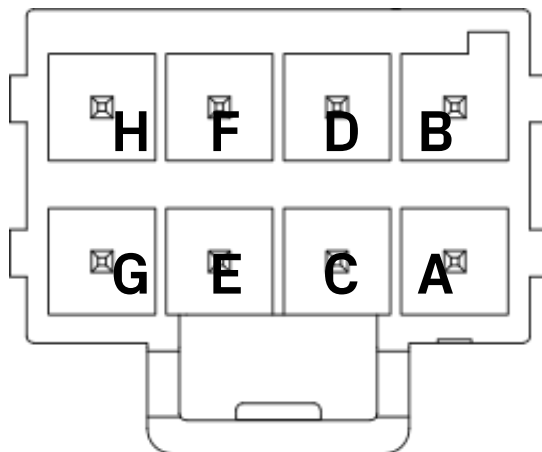
Table D2. XP2 Connector Pin Assignments

Signal	Description
Px.y	Universal connection
GND	Ground connection
NC	No connection
Row f,z	Shield

Table D3. XP2 Connector Signal Descriptions

RTI-12305

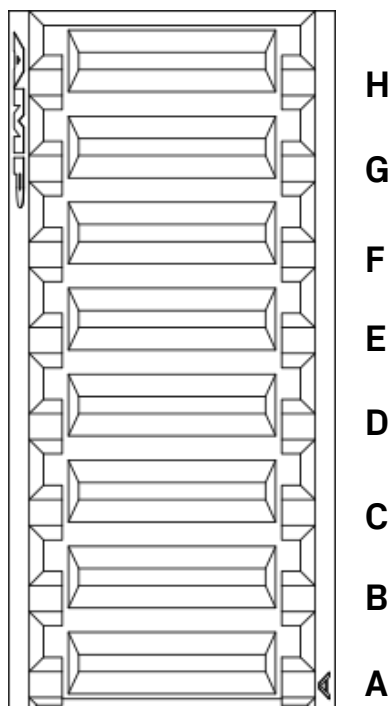
JR1 Connector Pinout



Signal	JR1 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

Table D4. JR1 Connector Signal Descriptions

XP3 Connector Pinout



Signal	XP3 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

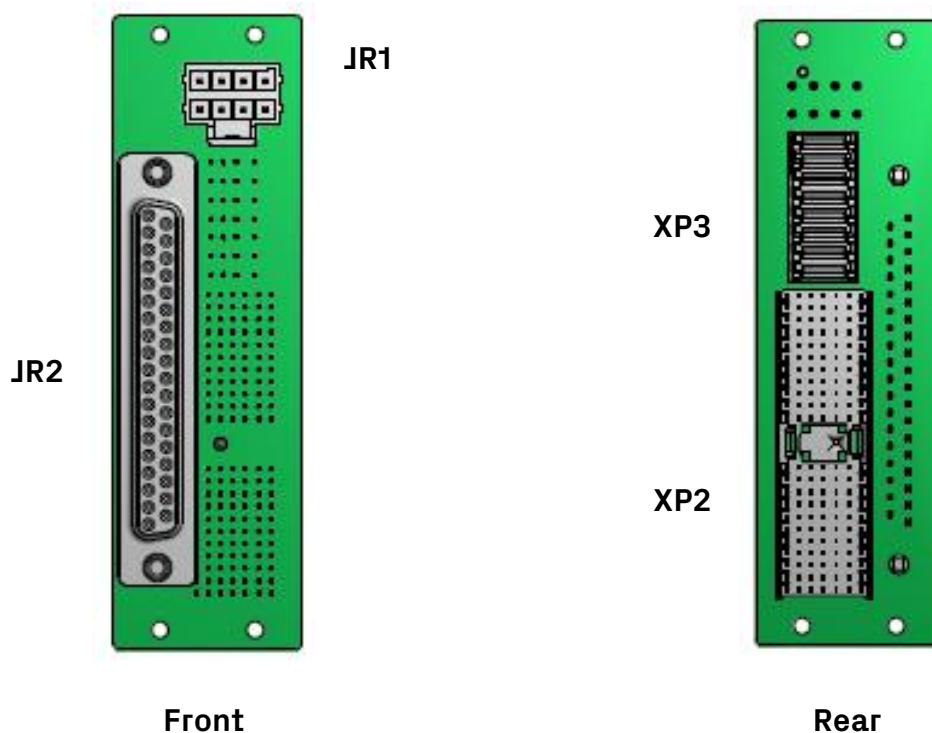
Table D5. XP3 Connector Signal Descriptions

RTI-12305 Overview



RTI-12344

Universal-32 – AI 37DSUB



XP2

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 1 A per contact at 30°C ambient temperature

XP3

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR1

Voltage

max: 60 V_{DC} to ground or to another contact within the connector

Current

max: 8 A per contact at 30°C ambient temperature

JR2-JR5

Voltage

max. 60 V_{DC} to ground or to another contact within the connector

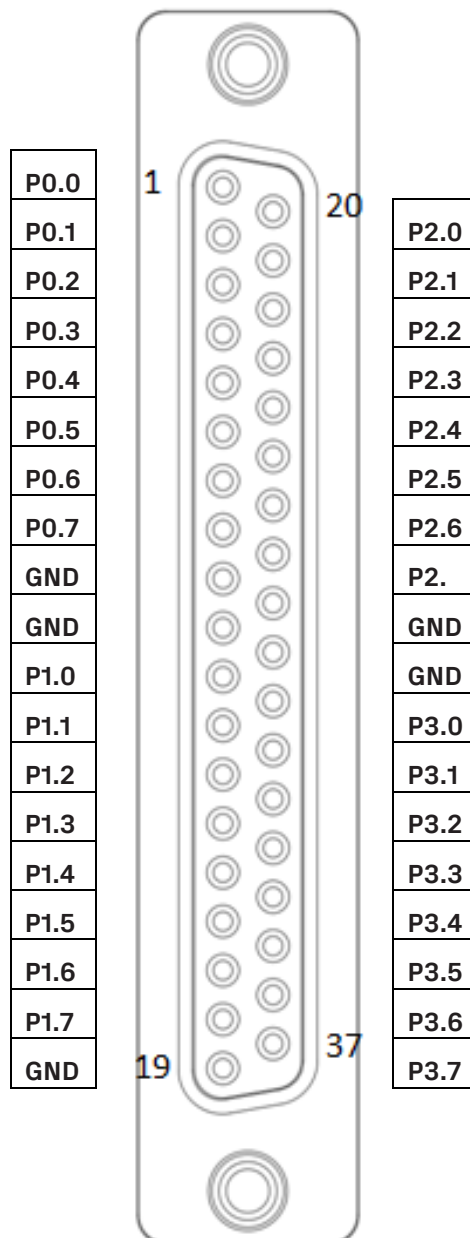
Current

max: 1 A per contact at 30°C ambient temperature

Dimensions

SET RTI DIMENSIONS 101.9 mm x 30.2 mm

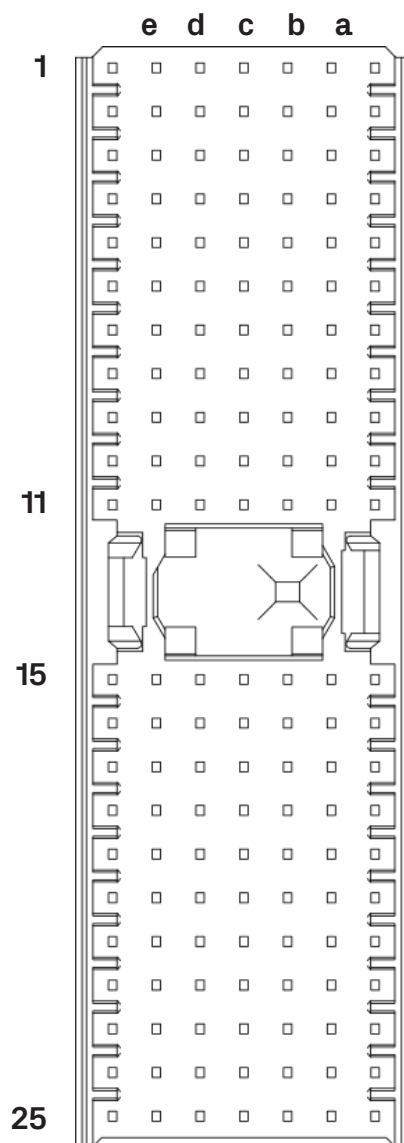
JR2 Pinout



Signal	Description
Px.y	Line y in Port x
GND	Ground connection
NC	No connection

Table E1. JR2 Connector Pin Assignments

XP2 Connector Pinout



Row	a	b	c	d	e
1	P0.0	P0.1	NC	P0.2	P0.3
2	P0.4	P0.5	NC	P0.6	P0.7
3	GND	GND	GND	GND	GND
4	P0.8	P0.9	NC	P0.10	P0.11
5	P0.12	P0.13	NC	P0.14	P0.15
6	GND	GND	GND	GND	GND
7	P0.16	P0.17	NC	P0.18	P0.19
8	P0.20	P0.21	NC	P0.22	P0.23
9	GND	GND	GND	GND	GND
10	P0.24	P0.25	NC	P0.26	P0.27
11	P0.28	P0.29	NC	P0.30	P0.31
15	P0.32	P0.33	NC	P0.34	P0.35
16	P0.36	P0.37	NC	P0.38	P0.39
17	GND	GND	GND	GND	GND
18	P0.40	P0.41	NC	P0.42	P0.43
19	P0.44	P0.45	NC	P0.46	P0.47
20	GND	GND	GND	GND	GND
21	P0.48	P0.49	NC	P0.50	P0.51
22	P0.52	P0.53	NC	P0.54	P0.55
23	GND	GND	GND	GND	GND
24	P0.56	P0.57	NC	P0.58	P0.59
25	P0.60	P0.61	NC	P0.62	P0.63

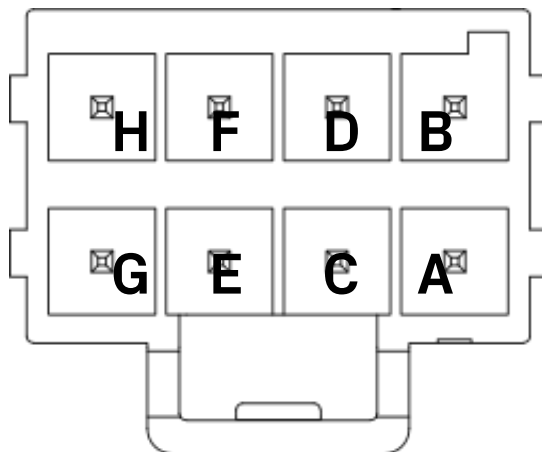
Table E2. XP2 Connector Pin Assignments

Signal	Description
Px.y	Universal connection
GND	Ground connection
NC	No connection
Row f,z	Shield

Table E3. XP2 Connector Signal Descriptions

RTI-12344

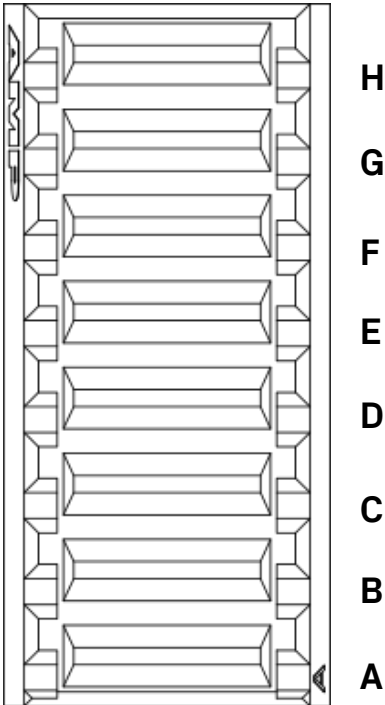
JR1 Connector Pinout



Signal	JR1 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

Table E4. JR1 Connector Signal Descriptions

XP3 Connector Pinout



Signal	XP3 Pin	Description
V1+	H	Positive Voltage 1
V1-	G	Negative Voltage 1
V2+	F	Positive Voltage 2
V2-	E	Negative Voltage 2
V3+	D	Positive Voltage 3
V3-	C	Negative Voltage 3
V4+	B	Positive Voltage 4
V4-	A	Negative Voltage 4

Table E5. XP3 Connector Signal Descriptions

RTI-12344 Overview

