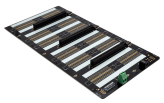
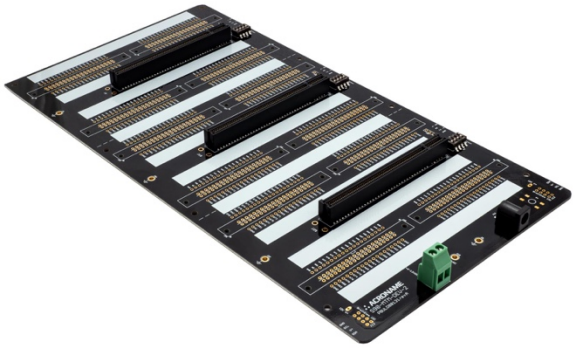




Overview

The Acroname MTM Development Board 2.0 (MTM-DEV-2), part of Acroname's MTM (Manufacturing Test Module) product series, is a connectivity solution designed for development or integration to wire-based testers. The MTM-DEV-2 allows MTM system designers to easily and quickly access MTM module resources through direct soldering, 0.1" headers or ribbon cable connections.

Ideal for use in high-reliability manufacturing or development testing environments, MTM-DEV-2 includes three policy-free slots, allowing access to up to three MTM modules installed in any combination.

Based on Acroname's industry-proven and well-adopted BrainStem® technology, resources on MTM modules installed in the MTM-DEV-2 are controlled and accessed via Acroname's powerful and extensible BrainStem® software APIs.
Typical applications include:

- Manufacturing functional testing
- Validation testing
- Automated test development
- Embedded system development

Features

- 3 policy-free MTM module slots
- BrainStem network connection between slots
- DIP switches to customize BrainStem addresses
- 6-12V power input via barrel jack or screw terminal connection
- BrainStem bus connection for expansion
- Pin access to MTM resources on all MTM slots
- Customizable to support direct wire soldering, ribbon cable or terminal style connectors

Description

The MTM-DEV-2 breakout board is a convenient component for manufacturing test solutions implementing MTM using wired connections. For more information on the MTM platform architecture, please refer to www.acroname.com.
The MTM-DEV-2 implements three (3) policy-free MTM slots to accommodate any three MTM modules in any combination.
The high-density connections of the MTM modules are broken out to low-density 0.1" spaced connections. Headers, screw terminals or ribbon cable connectors can be installed to customize the connectivity needed in a given test system.
Modules installed in MTM-DEV-2 are networked together via a local I2C-based BrainStem network. DIP switches near each slot allow custom addressing of each module on the BrainStem network. Two optional connectors on MTM-DEV-2 allow the BrainStem network to be expanded to other BrainStem enabled devices or development boards. Features of any MTM modules installed are easily controlled via the BrainStem API.
Within the MTM platform architecture, any MTM module can operate either independently or as a component in a larger network of MTM modules. Each module is uniquely addressable and controllable from a host by connecting via the on-board USB connection, the module's card-edge USB input or through other MTM modules on the local MTM/BrainStem I2C bus.

IMPORTANT NOTE:
The MTM-DEV-2, like all MTM-family products, utilizes a PCIe connector interface but is for use strictly in MTM-based systems – it should never be used with PCI adapters directly. Connection with a PC or non-MTM system could cause damage to the PC or PCI adapters.

Absolute Maximum Ratings

Any ABSOLUTE MAXIMUM RATINGS for MTM-DEV-2 will be specific to the MTM modules installed. Please refer to the datasheets related to specific MTM modules for the relevant ABSOLUTE MAXUMUM RATINGS.

Block Diagram

Showing populated and not populated (NP) connectors:

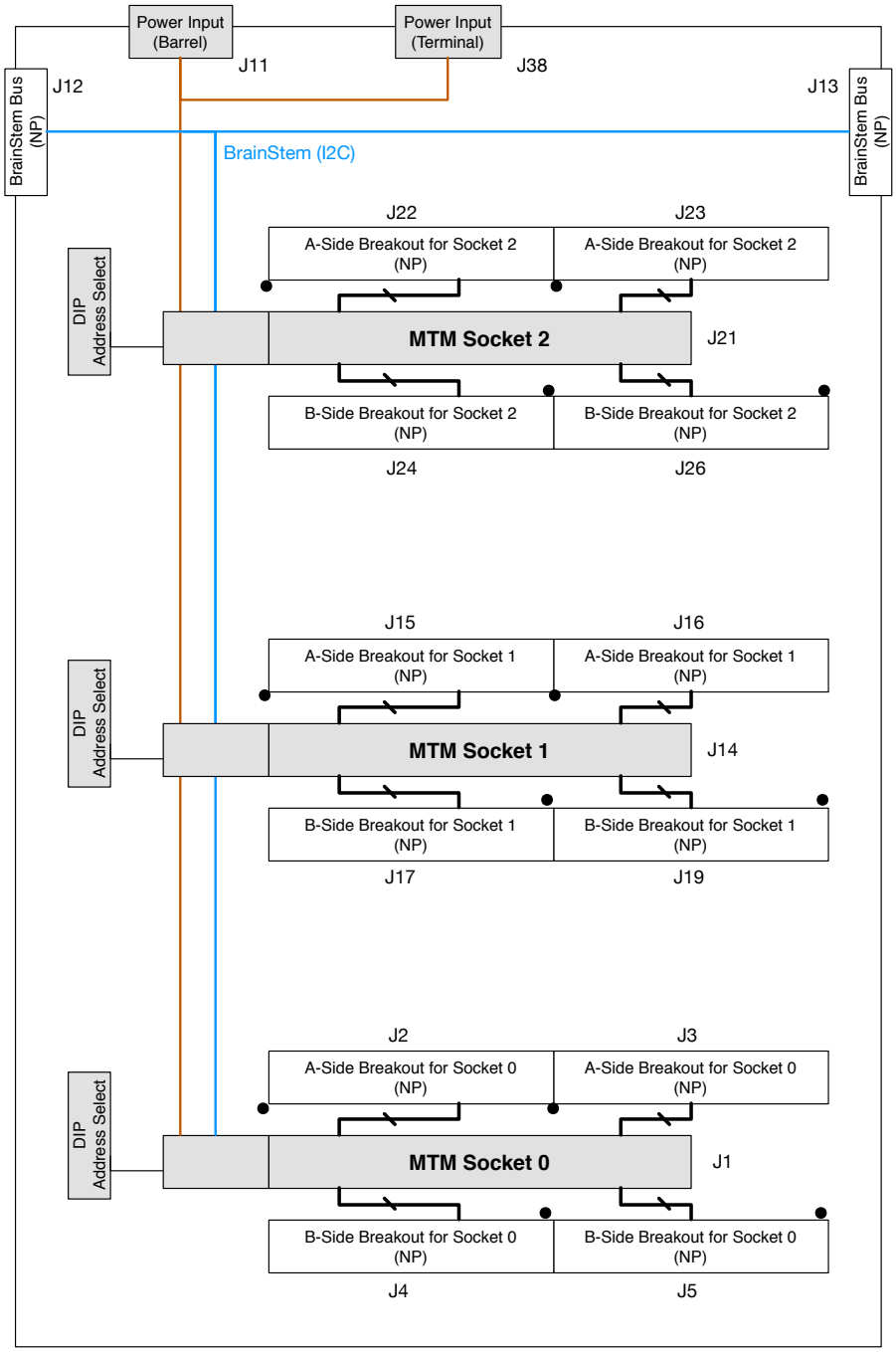


Figure 1: MTM-DEV-2 Block Diagram

Typical Applications

Automated Functional Circuit Test (FCT) using MTM to wire-wrapped test point pogos:

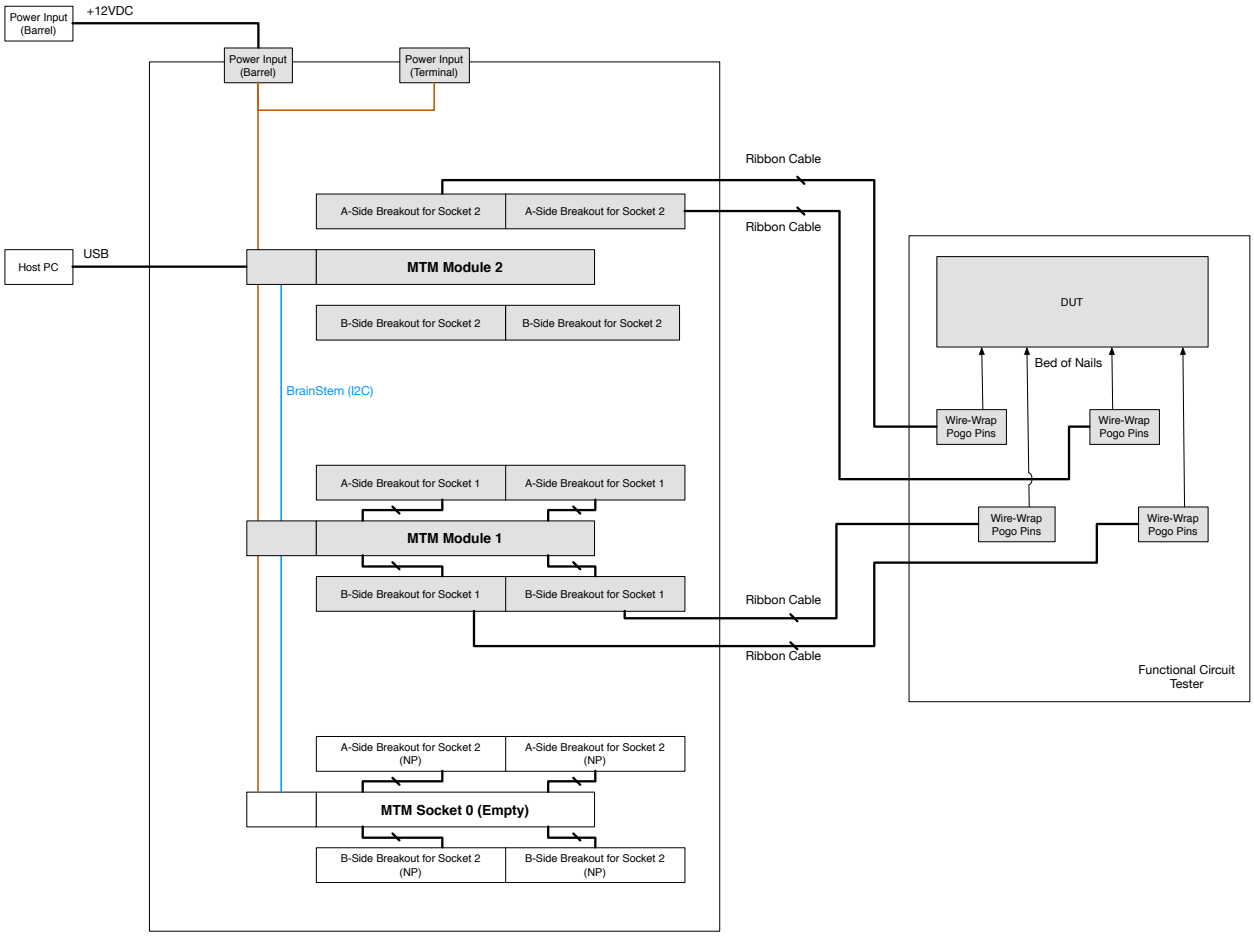


Figure 2: Typical Automated Functional Tester Application

Connectors

Location of connectors on MTM-DEV-2:

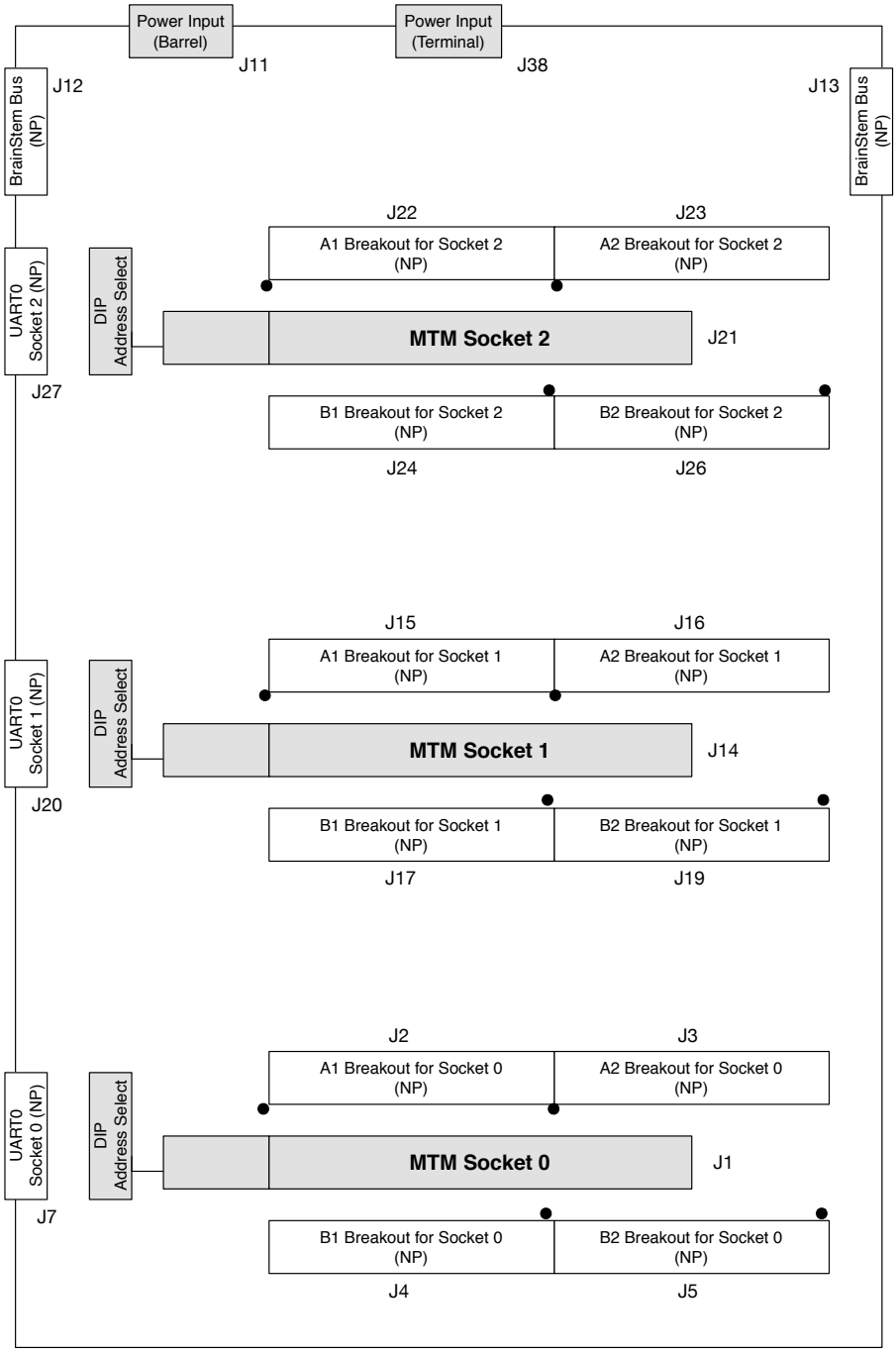


Figure 3: Location of connectors

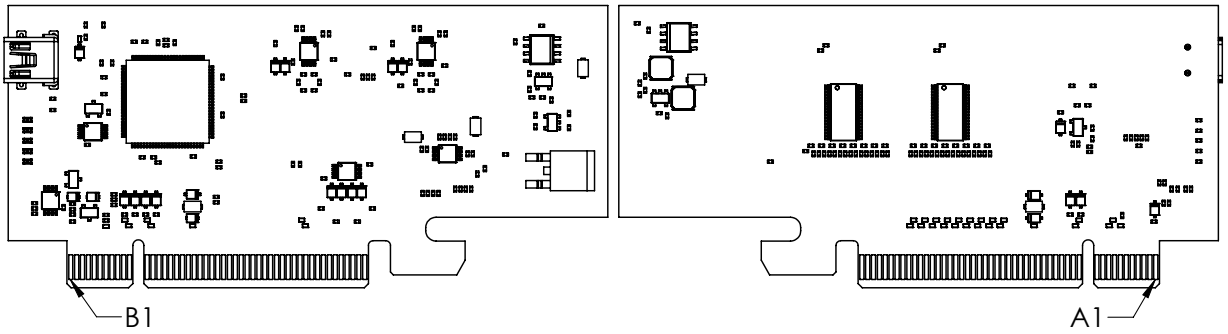
List of connectors on MTM-DEV-2:

Connector Designator	Description	Pins	Populated
J1	MTM Module Socket 0	164	Yes
J2	MTM Socket 0: A-side breakout A1	40	No
J3	MTM Socket 0: A-side breakout A2	40	No
J4	MTM Socket 0: B-side breakout B1	40	No
J5	MTM Socket 0: B-side breakout B2	40	No
J7	MTM Socket 0: UART0	4	No
J11	Barrel Power Input	3 (2pin Barrel)	Yes
J12	BrainStem Bus Expansion	8	No
J13	BrainStem Bus Expansion	8	No
J14	MTM Module Socket 1	164	Yes
J15	MTM Socket 1: A-side breakout A1	40	No
J16	MTM Socket 1: A-side breakout A2	40	No
J17	MTM Socket 1: B-side breakout B1	40	No
J19	MTM Socket 1: B-side breakout B2	40	No
J20	MTM Socket 1: UART0	4	No
J21	MTM Module Socket 2	164	Yes
J22	MTM Socket 2: A-side breakout A1	40	No
J23	MTM Socket 2: A-side breakout A2	40	No
J24	MTM Socket 2: B-side breakout B1	40	No
J26	MTM Socket 2: B-side breakout B2	40	No
J27	MTM Socket 2: UART0	4	No
J38	Terminal Power Input	2	Yes

Table 1: MTM-DEV-2 Connectors

Pinout Descriptions

WARNING: Acroname's MTM line features a PCIe connector that is common in most desktop computers; however, they are NOT intended nor designed to work in these devices. Do NOT insert this product into any PCIe slot that wasn't specifically designed for this product! Failure to follow this warning WILL result in damage to this product and any device you connect it to.
The MTM edge connector pin assignments are shown in the following table.
An example MTM module is shown below:



J1, J14, J21: MTM Sockets (pins common to all modules)

Edge Connector Side A	Edge Connector Side A Description	Breakout A1	Edge Connector Side B	Edge Connector Side B Description	Breakout B1
A1	GND	1	B1	Input Voltage, V_{supply}	-
A2	GND	2	B2	Input Voltage, V_{supply}	-
A3	GND	-	B3	Input Voltage, V_{supply}	-
A4	GND	-	B4	Input Voltage, V_{supply}	-
A5	Reset[2]	All MTM, RST Button	B5	Input Voltage, V_{supply}	-
A6	GND	-	B6	Reserved, Do Not Connect	-
A7	GND	-	B7	Reserved, Do Not Connect	-
A8	I^2C0 SCL[1]	3	B8	GND	-
A9	I^2C0 SDA[1]	4	B9	GND	-
A10	GND	-	B10	Reserved, Do Not Connect	-
A11	GND	-	B11	Reserved, Do Not Connect	-
A12	Module Address Offset 0	MTM SW0	B12	Module Address Offset 2	MTM SW2
A13	Module Address Offset 1	MTM SW1	B13	Module Address Offset 3	MTM SW3

[1] I^2C0 SCL and SDA nets are connected to all MTM module sockets and the BrainStem bus connectors (not populated)
[2] Reset net is connected to all MTM module sockets and the reset push button (not populated)

J1, J14, J21: MTM Sockets (pins specific to each MTM module)

Edge Connector Side A	Edge Connector Side A Description	Breakout A1	Edge Connector Side B	Edge Connector Side B Description	Breakout B1
A14	Module-specific	6	B14	Module-specific	36
A15	Module-specific	5	B15	Module-specific	35
A16	Module-specific	8	B16	Module-specific	34
A17	Module-specific	7	B17	Module-specific	33
A18	Module-specific	10	B18	Module-specific	32
A19	Module-specific	9	B19	Module-specific	31
A20	Module-specific	12	B20	Module-specific	30
A21	Module-specific	11	B21	Module-specific	29
A22	Module-specific	14	B22	Module-specific	28
A23	Module-specific	13	B23	Module-specific	27
A24	Module-specific	16	B24	Module-specific	26
A25	Module-specific	15	B25	Module-specific	25
A26	Module-specific	18	B26	Module-specific	24
A27	Module-specific	17	B27	Module-specific	23
A28	Module-specific	20	B28	Module-specific	22
A29	Module-specific	19	B29	Module-specific	21
A30	Module-specific	22	B30	Module-specific	20
A31	Module-specific	21	B31	Module-specific	19
A32	Module-specific	24	B32	Module-specific	18
A33	Module-specific	23	B33	Module-specific	17
A34	Module-specific	26	B34	Module-specific	16
A35	Module-specific	25	B35	Module-specific	15
A36	Module-specific	26	B36	Module-specific	14
A37	Module-specific	27	B37	Module-specific	13
A38	Module-specific	30	B38	Module-specific	12
A39	Module-specific	29	B39	Module-specific	11
A40	Module-specific	32	B40	Module-specific	10
A41	Module-specific	31	B41	Module-specific	9
A42	Module-specific	34	B42	Module-specific	8
A43	Module-specific	33	B43	Module-specific	7

Edge Connector Side A	Edge Connector Side A Description	Breakout A1	Edge Connector Side B	Edge Connector Side B Description	Breakout B1
A44	Module-specific	36	B44	Module-specific	6
A45	Module-specific	35	B45	Module-specific	5
A46	Module-specific	38	B46	Module-specific	4
A47	Module-specific	37	B47	Module-specific	3

Edge Connector Side A	Edge Connector Side A Description	Breakout A2	Edge Connector Side B	Edge Connector Side B Description	Breakout B2
A48	Module-specific	4	B48	Module-specific	38
A49	Module-specific	3	B49	Module-specific	37
A50	Module-specific	6	B50	Module-specific	36
A51	Module-specific	5	B51	Module-specific	35
A52	Module-specific	8	B52	Module-specific	34
A53	Module-specific	7	B53	Module-specific	33
A54	Module-specific	10	B54	Module-specific	32
A55	Module-specific	9	B55	Module-specific	31
A56	Module-specific	12	B56	Module-specific	30
A57	Module-specific	11	B57	Module-specific	29
A58	Module-specific	14	B58	Module-specific	28
A59	Module-specific	13	B59	Module-specific	27
A60	Module-specific	16	B60	Module-specific	26
A61	Module-specific	15	B61	Module-specific	25
A62	Module-specific	18	B62	Module-specific	24
A63	Module-specific	17	B63	Module-specific	23
A64	Module-specific	20	B64	Module-specific	22
A65	Module-specific	19	B65	Module-specific	21
A66	Module-specific	22	B66	Module-specific	20
A67	Module-specific	21	B67	Module-specific	19
A68	Module-specific	24	B68	Module-specific	18
A69	Module-specific	23	B69	Module-specific	17
A70	Module-specific	26	B70	Module-specific	16

Edge Connector Side A	Edge Connector Side A Description	Breakout A2	Edge Connector Side B	Edge Connector Side B Description	Breakout B2
A71	Module-specific	25	B71	Module-specific	15
A72	Module-specific	28	B72	Module-specific	14
A73	Module-specific	27	B73	Module-specific	13
A74	Module-specific	30	B74	Module-specific	12
A75	Module-specific	29	B75	Module-specific	11
A76	Module-specific	32	B76	Module-specific	10
A77	Module-specific	31	B77	Module-specific	9
A78	Module-specific	34	B78	Module-specific	8
A79	Module-specific	33	B79	Module-specific	7
A80	Module-specific	36	B80	Module-specific	6
A81	Module-specific	35	B81	Module-specific	5
A82	Module-specific	38	B82	Module-specific	4

Table 2: MTM Module Socket Pinout

J2, J15, J21 (A1): 40-pin Connectors

Header Connector A1	Description	MTM Side A
1	GND	A1-A4, A7, A10, A11
2	GND	A1-A4, A7, A10, A11
3	I2C0 SCL (BrainStem)	A8
4	I2C0 SDA (BrainStem)	A9
5	Module-Specific	A15
6	Module-Specific	A14
7	Module-Specific	A17
8	Module-Specific	A16
9	Module-Specific	A19
10	Module-Specific	A18
11	Module-Specific	A21

Header Connector A1	Description	MTM Side A
12	Module-Specific	A20
13	Module-Specific	A23
14	Module-Specific	A22
15	Module-Specific	A25
16	Module-Specific	A24
17	Module-Specific	A27
18	Module-Specific	A26
19	Module-Specific	A29
20	Module-Specific	A28
21	Module-Specific	A31
22	Module-Specific	A30
23	Module-Specific	A33
24	Module-Specific	A32
25	Module-Specific	A35
26	Module-Specific	A34
27	Module-Specific	A37
28	Module-Specific	A36
29	Module-Specific	A39
30	Module-Specific	A38
31	Module-Specific	A41
32	Module-Specific	A40
33	Module-Specific	A43
34	Module-Specific	A42
35	Module-Specific	A45
36	Module-Specific	A44
37	Module-Specific	A47
38	Module-Specific	A46
39	GND	A1-A4, A7, A10, A11
40	GND	A1-A4, A7, A10, A11

Table 3: Pinout for MTM Breakout A1 Connectors

J2, J15, J21 (A1): 40-pin Connectors WIDE FORMAT

Header Connector A1	Description	MTM Side A	Header Connector A1	Description	MTM Side A
1	GND	A1-A4, A7, A10, A11	2	GND	A1-A4, A7, A10, A11
3	I2C0 SCL (BrainStem)	A8	4	I2C0 SDA (BrainStem)	A9
5	Module-Specific	A15	6	Module-Specific	A14
7	Module-Specific	A17	8	Module-Specific	A16
9	Module-Specific	A19	10	Module-Specific	A18
11	Module-Specific	A21	12	Module-Specific	A20
13	Module-Specific	A23	14	Module-Specific	A22
15	Module-Specific	A25	16	Module-Specific	A24
17	Module-Specific	A27	18	Module-Specific	A26
19	Module-Specific	A29	20	Module-Specific	A28
21	Module-Specific	A31	22	Module-Specific	A30
23	Module-Specific	A33	24	Module-Specific	A32
25	Module-Specific	A35	26	Module-Specific	A34
27	Module-Specific	A37	28	Module-Specific	A36
29	Module-Specific	A39	30	Module-Specific	A38
31	Module-Specific	A41	32	Module-Specific	A40
33	Module-Specific	A43	34	Module-Specific	A42
35	Module-Specific	A45	36	Module-Specific	A44
37	Module-Specific	A47	38	Module-Specific	A46
39	GND	A1-A4, A7, A10, A11	40	GND	A1-A4, A7, A10, A11

Table 4: Pinout for MTM Breakout A1 Connectors

J3, J16, J23 (A2): 40-pin Connectors

Header Connector A2	Description	MTM Side A
1	GND	A1-A4, A7, A10, A11
2	GND	A1-A4, A7, A10, A11
3	Module-Specific	A49
4	Module-Specific	A48
5	Module-Specific	A51
6	Module-Specific	A50
7	Module-Specific	A53
8	Module-Specific	A52
9	Module-Specific	A55
10	Module-Specific	A54
11	Module-Specific	A57
12	Module-Specific	A56
13	Module-Specific	A59
14	Module-Specific	A58
15	Module-Specific	A61
16	Module-Specific	A60
17	Module-Specific	A63
18	Module-Specific	A62
19	Module-Specific	A65
20	Module-Specific	A64
21	Module-Specific	A67
22	Module-Specific	A66
23	Module-Specific	A69
24	Module-Specific	A68
25	Module-Specific	A71
26	Module-Specific	A70
27	Module-Specific	A73
28	Module-Specific	A72
29	Module-Specific	A75

Header Connector A2	Description	MTM Side A
30	Module-Specific	A74
31	Module-Specific	A77
32	Module-Specific	A76
33	Module-Specific	A79
34	Module-Specific	A78
35	Module-Specific	A81
36	Module-Specific	A80
37	Not Connected	-
38	Module-Specific	A82
39	GND	A1-A4, A7, A10, A11
40	GND	A1-A4, A7, A10, A11

Table 5: Pinout for MTM Breakout A2 Connectors

J3, J16, J23 (A2): 40-pin Connectors WIDE FORMAT

Header Connector A2	Description	MTM Side A	Header Connector A2	Description	MTM Side A
1	GND	A1-A4, A7, A10, A11	2	GND	A1-A4, A7, A10, A11
3	Module-Specific	A49	4	Module-Specific	A48
5	Module-Specific	A51	6	Module-Specific	A50
7	Module-Specific	A53	8	Module-Specific	A52
9	Module-Specific	A55	10	Module-Specific	A54
11	Module-Specific	A57	12	Module-Specific	A56
13	Module-Specific	A59	14	Module-Specific	A58
15	Module-Specific	A61	16	Module-Specific	A60
17	Module-Specific	A63	18	Module-Specific	A62
19	Module-Specific	A65	20	Module-Specific	A64
21	Module-Specific	A67	22	Module-Specific	A66
23	Module-Specific	A69	24	Module-Specific	A68
25	Module-Specific	A71	26	Module-Specific	A70
27	Module-Specific	A73	28	Module-Specific	A72
29	Module-Specific	A75	30	Module-Specific	A74
31	Module-Specific	A77	32	Module-Specific	A76
33	Module-Specific	A79	34	Module-Specific	A78
35	Module-Specific	A81	36	Module-Specific	A80
37	Not Connected	-	38	Module-Specific	A82
39	GND	A1-A4, A7, A10, A11	40	GND	A1-A4, A7, A10, A11

Table 6: Pinout for MTM Breakout A2 Connectors

J4, J17, J24 (B1): 40-pin Connectors

Header Connector B1	Description	MTM Side B
1	GND	B8, B9
2	GND	B8, B9
3	Module-Specific	B47
4	Module-Specific	B46
5	Module-Specific	B45
6	Module-Specific	B44
7	Module-Specific	B43
8	Module-Specific	B42
9	Module-Specific	B41
10	Module-Specific	B40
11	Module-Specific	B39
12	Module-Specific	B38
13	Module-Specific	B37
14	Module-Specific	B36
15	Module-Specific	B35
16	Module-Specific	B34
17	Module-Specific	B33
18	Module-Specific	B32
19	Module-Specific	B31
20	Module-Specific	B30
21	Module-Specific	B29
22	Module-Specific	B28
23	Module-Specific	B27
24	Module-Specific	B26
25	Module-Specific	B25
26	Module-Specific	B24
27	Module-Specific	B23
28	Module-Specific	B22
29	Module-Specific	B21
30	Module-Specific	B20

Header Connector B1	Description	MTM Side B
31	Module-Specific	B19
32	Module-Specific	B18
33	Module-Specific	B17
34	Module-Specific	B16
35	Module-Specific	B15
36	Module-Specific	B14
37	UART0_TX	B10
38	UART0_RX	B11
39	GND	B8, B9
40	GND	B8, B9

Table 7: Pinout for MTM Breakout B1 Connectors

J4, J17, J24 (B1): 40-pin Connectors WIDE FORMAT

Header Connector B1	Description	MTM Side B	Header Connector B1	Description	MTM Side B
1	GND	B8, B9	2	GND	B8, B9
3	Module-Specific	B47	4	Module-Specific	B46
5	Module-Specific	B45	6	Module-Specific	B44
7	Module-Specific	B43	8	Module-Specific	B42
9	Module-Specific	B41	10	Module-Specific	B40
11	Module-Specific	B39	12	Module-Specific	B38
13	Module-Specific	B37	14	Module-Specific	B36
15	Module-Specific	B35	16	Module-Specific	B34
17	Module-Specific	B33	18	Module-Specific	B32
19	Module-Specific	B31	20	Module-Specific	B30
21	Module-Specific	B29	22	Module-Specific	B28
23	Module-Specific	B27	24	Module-Specific	B26
25	Module-Specific	B25	26	Module-Specific	B24
27	Module-Specific	B23	28	Module-Specific	B22
29	Module-Specific	B21	30	Module-Specific	B20
31	Module-Specific	B19	32	Module-Specific	B18
33	Module-Specific	B17	34	Module-Specific	B16
35	Module-Specific	B15	36	Module-Specific	B14
37	UART0_TX	B10	38	UART0_RX	B11
39	GND	B8, B9	40	GND	B8, B9

Table 8: Pinout for MTM Breakout B1 Connectors

J5, J19, J26 (B2): 40-pin Connectors

Header Connector B2	Description	MTM Side B
1	GND	B8, B9
2	GND	B8, B9
3	Not Connected	-
4	Module-Specific	B82
5	Module-Specific	B81
6	Module-Specific	B80
7	Module-Specific	B79
8	Module-Specific	B78
9	Module-Specific	B77
10	Module-Specific	B76
11	Module-Specific	B75
12	Module-Specific	B74
13	Module-Specific	B73
14	Module-Specific	B72
15	Module-Specific	B71
16	Module-Specific	B70
17	Module-Specific	B69
18	Module-Specific	B68
19	Module-Specific	B67
20	Module-Specific	B66
21	Module-Specific	B65
22	Module-Specific	B64
23	Module-Specific	B63
24	Module-Specific	B62
25	Module-Specific	B61
26	Module-Specific	B60
27	Module-Specific	B59
28	Module-Specific	B58
29	Module-Specific	B57

Header Connector B2	Description	MTM Side B
30	Module-Specific	B56
31	Module-Specific	B55
32	Module-Specific	B54
33	Module-Specific	B53
34	Module-Specific	B52
35	Module-Specific	B51
36	Module-Specific	B50
37	Module-Specific	B49
38	Module-Specific	B48
39	GND	B8, B9
40	GND	B8, B9

Table 9: Pinout for MTM Breakout B2 Connectors

J5, J19, J26 (B2): 40-pin Connectors WIDE FORMAT

Header Connector B2	Description	MTM Side B	Header Connector B2	Description	MTM Side B
1	GND	B8, B9	2	GND	B8, B9
3	Not Connected	-	4	Module-Specific	B82
5	Module-Specific	B81	6	Module-Specific	B80
7	Module-Specific	B79	8	Module-Specific	B78
9	Module-Specific	B77	10	Module-Specific	B76
11	Module-Specific	B75	12	Module-Specific	B74
13	Module-Specific	B73	14	Module-Specific	B72
15	Module-Specific	B71	16	Module-Specific	B70
17	Module-Specific	B69	18	Module-Specific	B68
19	Module-Specific	B67	20	Module-Specific	B66
21	Module-Specific	B65	22	Module-Specific	B64
23	Module-Specific	B63	24	Module-Specific	B62
25	Module-Specific	B61	26	Module-Specific	B60
27	Module-Specific	B59	28	Module-Specific	B58
29	Module-Specific	B57	30	Module-Specific	B56
31	Module-Specific	B55	32	Module-Specific	B54
33	Module-Specific	B53	34	Module-Specific	B52
35	Module-Specific	B51	36	Module-Specific	B50
37	Module-Specific	B49	38	Module-Specific	B48
39	GND	B8, B9	40	GND	B8, B9

Table 10: Pinout for MTM Breakout B2 Connectors

J11 2-pin Barrel: Power

Pin	Description
1	Center / Vsupply
2	Ring / GND
3	Ring / GND

Table 11: Pinout for Barrel Power Connector

J38 2-pin Terminal: Power

Pin	Description
1	Vsupply
2	GND

Table 12: Pinout for Terminal Power Connector

J12, J13: BrainStem I2C

Pin	Description
1	GND
2	GND
3	SCL
4	SCL
5	Reserved (I2C V+)
6	Reserved (I2C V+)
7	SDA
8	SDA

Table 13: Pinout for BrainStem I2C Connectors

J7, J20, J27: MTM Socket UART0

Pin	Description
1	GND
2	TX
3	NC
4	RX

Table 14: Pinout for MTM Socket UART Connectors

Module Connectivity

BrainStem:

Module slots on MTM-DEV-2 are connected together using the BrainStem bus through I2C0 on pins A8 and A9 of the PCIe edge connector. The BrainStem bus is accessible through J12 or J13 connectors for external access or expansion to other BrainStem enabled devices.

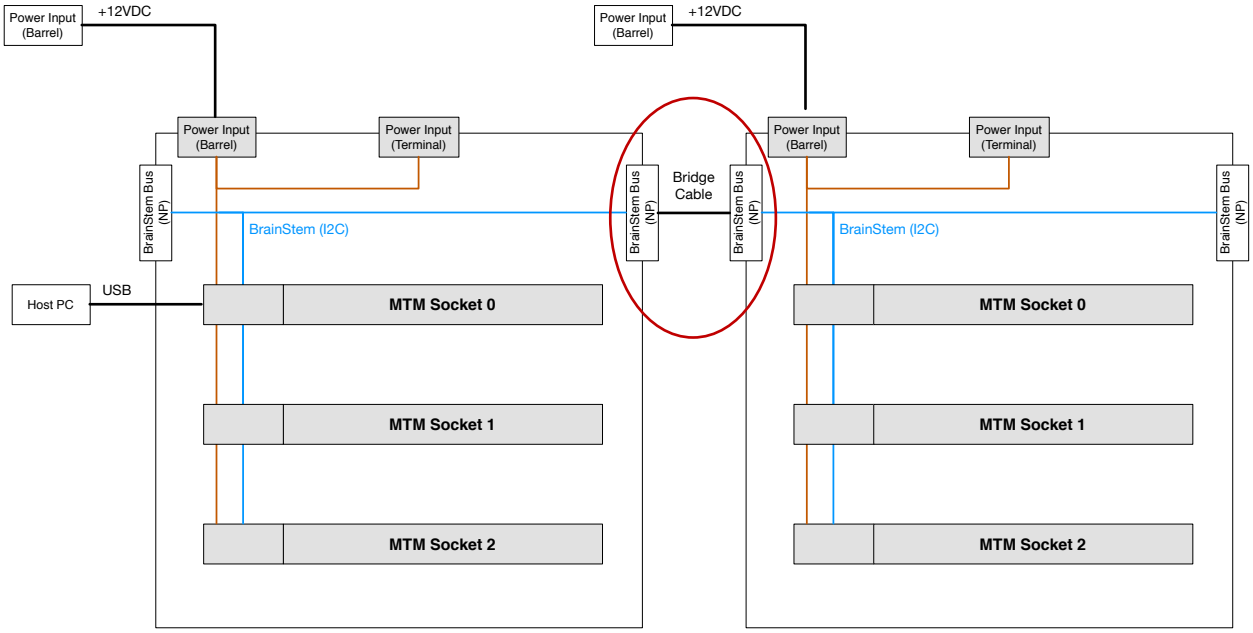


Figure 4: Bridging multiple MTM-DEV-2 boards using BrainStem

MTM Edge Connector Interface

All MTM products are designed with an edge connector interface that requires a compatible edgeboard connector on the carrier PCB. Acroname recommends the through-hole PCI-Express (PCIe) Vertical Connector. The connectors can be combined with an optional retention clip, as shown below. MTM-DEV-2 is populated with 164-position connectors which accept any MTM module.

MTM Product	Manufacturer	Manufacturer Part Number	Description
MTM-DAQ-1	Amphenol FCI Samtec	10018784-10203TLF PCIE-164-02-F-D-TH	PCI-Express 164-position vertical connector
MTM-IO-Serial	Amphenol FCI Samtec	10018784-10202TLF PCIE-098-02-F-D-TH	PCI-Express 98-position vertical connector
MTM-PM-1	Amphenol FCI Samtec	10018784-10201TLF PCIE-064-02-F-D-TH	PCI-Express 64-position vertical connector
MTM-USBStem	Amphenol FCI Samtec	10018784-10201TLF PCIE-064-02-F-D-TH	PCI-Express 64-position vertical connector
MTM-EtherStem	Amphenol FCI Samtec	10018784-10201TLF PCIE-064-02-F-D-TH	PCI-Express 64-position vertical connector
All Models	Amphenol FCI	10042618-003LF	PCI-Express Retention Clip (optional)

Table 15: PCI-Express Edge Connectors for MTM Products

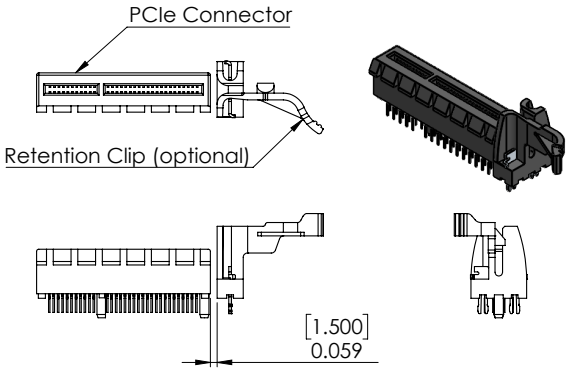


Figure 5: PCIe Vertical Connector with optional Retention Clip

MTM Edge Connector Specifications	Description
Contact Finish	Gold
Card Thickness	0.0625" [1.59mm]
Number of Rows	2
Number of Positions	Variable (see Table 15: PCI-Express Edge Connectors for MTM Products)
Pitch	0.039" (1.00mm)

Table 16: MTM Edge Connector Specifications

Amphenol FCI Drawings and Layout: http://portal.fciconnect.com/Comergent//fci/drawing/10018784.pdf
Amphenol FCI Product Specification: http://portal.fciconnect.com/res/en/pdffiles/Specs/gs-12-233.pdf
Samtec Product Catalog: http://suddendocs.samtec.com/catalog_english/pcie.pdf

Breakout Connector Interface

Breakouts for MTM modules are provided on 0.1" spaced connectors. Though specific connectors are required, Acroname has designed MTM-DEV-2 to accommodate standard 0.1" pitch headers. Suggested connectors include:

Manufacturer	Manufacturer Part Number	Description
Amphenol FCI Samtec	65863-085LF TST-120-01-G-D	40-pin 0.1" Shrouded Connector Header

Breakout Connector Specifications	Description
Contact Finish	Gold
Number of Rows	2
Number of Positions	Variable
Pitch	0.1" (2.54mm)

Table 17: Suggested Breakout Connectors

Mechanical

Dimensions are shown in inches [mm]. 3D CAD models are available through the MTM-DEV-2 product page Downloads section and from: https://a360.co/2jXXr1V

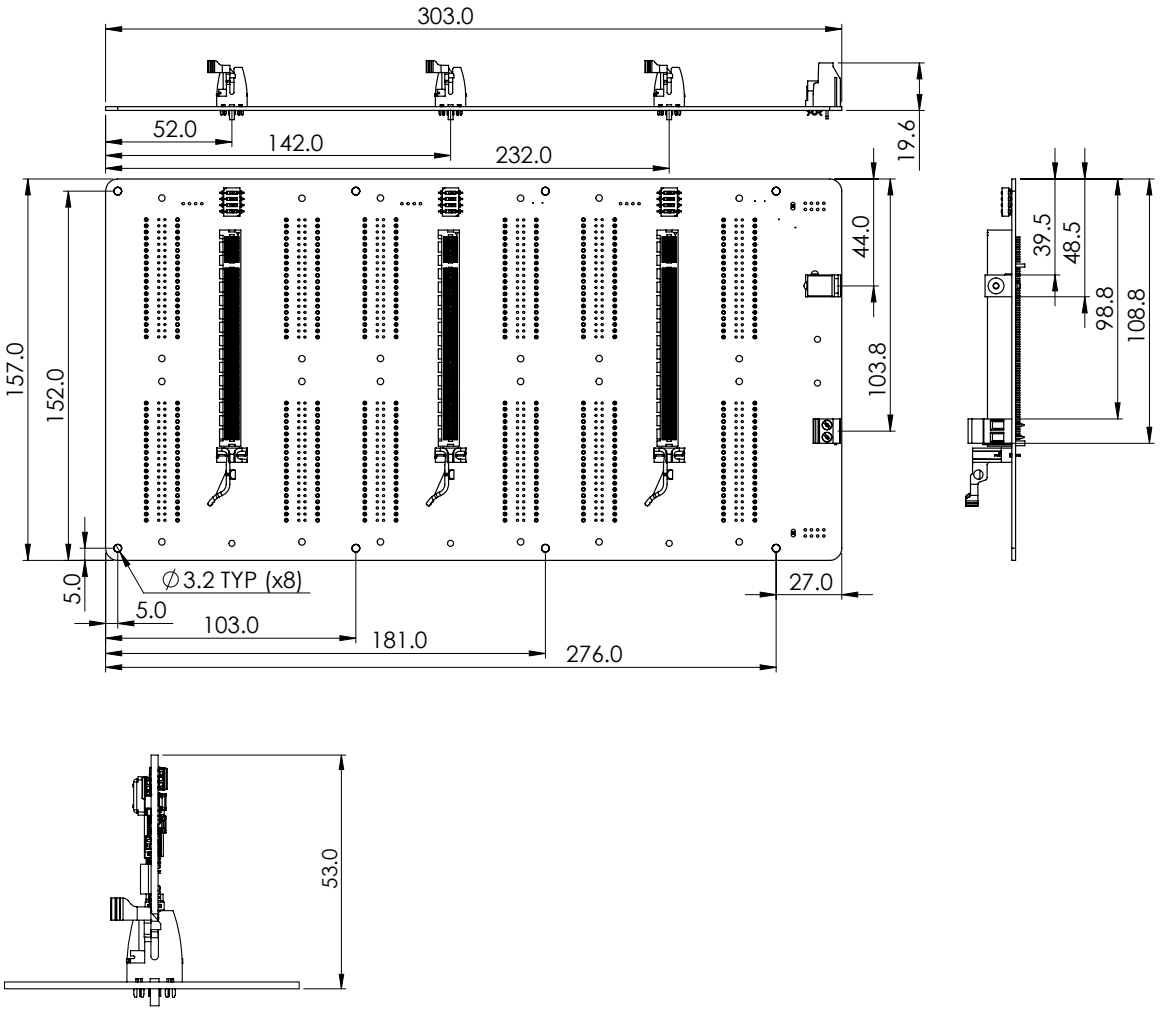


Figure 6: MTM-DEV-2 Mechanical

Module Address Hardware Offset Configuration

A hardware offset is one of two ways to modify the devices Module/I2C address. For detailed information on BrainStem networking see the online BrainStem reference guide at www.acroname.com/reference.

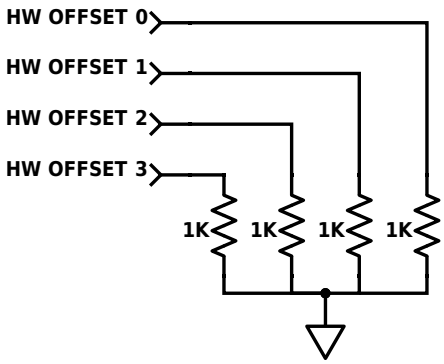


Figure 7: Module Address Hardware Offset

Document Revision History

All major documentation changes will be marked with a dated revision code

Revision	Date	Engineer	Description
1.0	June 15, 2018	LCD	Initial Release