



## Quick Reference Guide

### Express Mini Card and Display Mini Card Sockets

TE Connectivity's (TE) express mini card and display mini card sockets address interconnect requirements for expansion cards added on boards across server, desktop, consumer devices and notebook platforms. This product portfolio consists of right angle, surface mount sockets with 52 contacts (express mini card) or 76 contacts (display mini card). Latches are available for selected heights. The design meets the PCI-SIG industry standard for high speed data.

#### FEATURES & BENEFITS

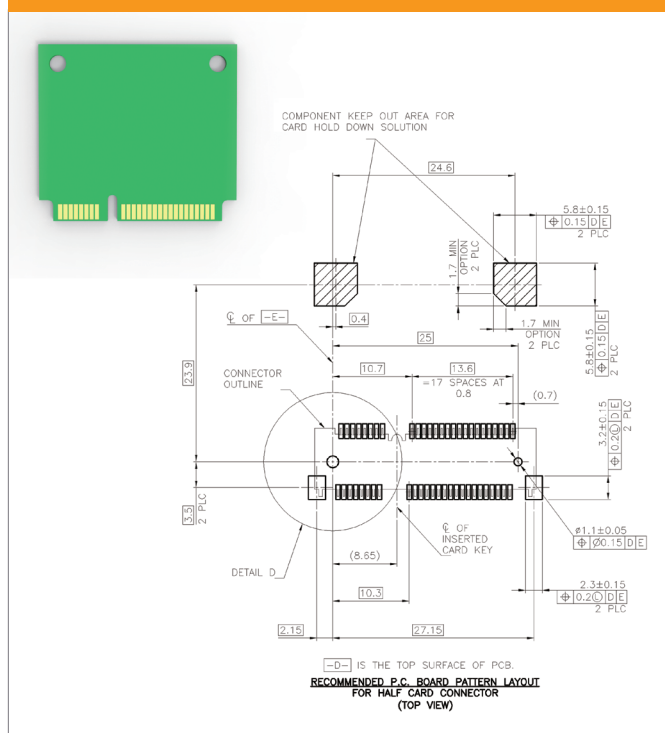
- Sockets available in heights from 4mm to 9.9 mm
- Capable of withstanding 50G mechanical shock testing
- Contact manufacturing method creates a contact with more stable normal force than other methods
- Compliant with PCI-SIG standard

#### APPLICATIONS

- Notebook PC
- Desktop PC
- Wireless Communication Equipment

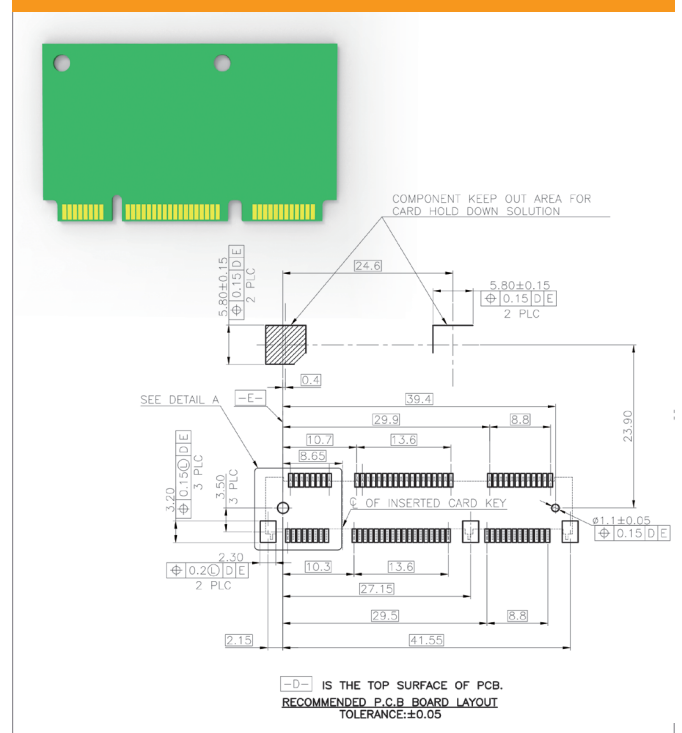
## Product Sizes

### Express Mini Card

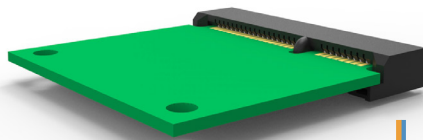


TE Connectivity's express mini card is fully compatible with PCI express mini card specification.

### Display Mini Card



TE Connectivity's display mini card is fully compatible with PCI express mini card, HDMI and displayport specification.



DMC card fully inserted into socket



#### CONNECTOR PIN-OUT DEFINITIONS (FOR BOTH DISPLAY AND EXPRESS MINI CARD)

PIN#	NAME	PIN#	NAME	PIN#	NAME
16	UIM_VPP	51	RESERVED	52	+3.3Vaux
15	GND	49	RESERVED	50	GND
14	UIM_RESET	47	RESERVED	48	+1.5V
13	REFCLK+	45	RESERVED	46	LED_WPAN#
12	UIM_CLK	43	GND	44	LED_WPAN#
11	REFCLK-	41	+3.3Vaux	42	LED_WPAN#
10	UIM_DATA	39	+3.3Vaux	40	GND
9	GND	37	GND	38	USB_D+
8	UIM_PWR	35	GND	36	USB_D-
7	CLKRFQ#	33	PETn0	34	GND
6	1.5V	31	PETn03	25	MB_DATA
5	COEX2	29	GND	30	SMB_CLK
4	GND	27	GND	28	+1.5V
3C	OEX1	25	PETn02	6	GND
23	.3Vaux	23	PETn0	24	+3.3Vaux
1W	AKE#	21	GND	22	PERST#
		19	RESERVED*(UIM_C4)	20	W_DISABLE#
		17	RESERVED*(UIM_C8)	8	GND

\* RESERVED FOR FUTURE UIM INTERFACE (IF NEEDED)

#### CONNECTOR PIN-OUT DEFINITIONS (FOR DMC)

PIN#	NAMEP	IN#	NAME
75	GND	76	MLDIR
73	ML0n	74	GND
71	ML0n	72	GND
69	GND	70	ML1p
67	GND	68	ML1p
65	ML2n	66	GND
63	ML2n	64	GND
61	GND	62	ML3P
59	GND	60	ML3n
57	AUXp	58	GND
55	AUXn	57	GND
53	DMC#	54	HPD

## 52 Position Express Mini Card Sockets

TE Part Number	Contact Plating Mating Area	Stack Height	Mount	Card Centerline to PCB	Packaging
2041119-1	Gold Flash	.157 in[4.00 mm]	Top	2.05mm	Tape and reel
2041119-2	Gold (10)	.157 in[4.00 mm]	Top	2.05mm	Tape and reel
1775862-1	Gold (10)	.205 in[5.2 mm]	Top	3.25mm	Tape and reel
1775862-2	Gold Flash	.205 in[5.2 mm]	Top	3.25mm	Tape and reel
1775838-1	Gold (10)	.220 in[5.6 mm]	Top	3.65mm	Tape and reel
1775838-2	Gold Flash	.220 in[5.6 mm]	Top	3.65mm	Tape and reel
2041262-1	Gold Flash	.268 in[6.8 mm]	Top	4.85mm	Tape and reel
2041262-2	Gold (10)	.268 in[6.8 mm]	Top	4.85mm	Tape and reel
1759547-1	Gold Flash	.276 in[7.0 mm]	Top	5.05mm	Tape and reel
1759503-1	Gold Flash	.315 in[8.0 mm]	Top	6.05mm	Tape and reel
1759513-1	Gold Flash	.354 in[9.0 mm]	Top	7.05mm	Tape and reel
1759546-1	Gold Flash	.390 in[9.9 mm]	Top	7.95mm	Tape and reel
2041216-1	Gold (10)	.390 in[9.9 mm]	Top	7.95mm	Tape and reel
1759941-1	Gold Flash	.177 in[4.5 mm]	Bottom	2.5mm	Tape and reel
1-1775861-2	Gold Flash	.157 in[4.00mm]	Top	2.05mm	Tape and reel
1775861-2	Gold Flash	.157 in[4.00mm]	Top	2.05mm	Tape and reel
1775861-2	Gold Flash	.157 in[4.00mm]	Top	2.05mm	Tape and reel
1775838-5	Gold Flash	.220 in[5.60mm]	Top	3.65mm	Tape and reel
2041286-2	Gold (30)	.157 in[4.00mm]	Top	2.04mm	Tape and reel

## 76 Position DMC (Display Mini Card) Sockets

2041286-1	Gold Flash	.157 in[4.00 mm]	Top	2.04mm	Tape and reel
-----------	------------	------------------	-----	--------	---------------

## Latches for Express Mini Card Sockets

1717832-2	N/A	.157 in[4.00 mm]			
1827682-1	N/A	.276 in[7.00 mm]			

# Frequently asked questions

## Question 1

Will express mini card connectors replace existing mini PCI connectors ?

## Answer 1

The trend will be to move towards express mini card, but mini PCI will still be used for some time.

## Question 2

Is a latch required when using this connector ?

## Answer 2

TE Connectivity does offer latches for the 4mm and 7mm connectors, but many customers manufacture their own standoffs

## Question 3

When would I use the DMC (Display Mini Card) connector instead of the express mini card ?

## Answer 3

If you need a wireless display option, you would use the DMC connector.

## FOR MORE INFORMATION

### TE Technical Support Center

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/South America:	+54 (0) 11-4733-6752
Germany:	+49 (0) 6251-133-1999
UK :	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

Part numbers this brochure are ROHS Compliant\*, unless marked otherwise.

\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

## TE.com

© 2016 Tyco Electronics Corporation, a TE Connectivity Ltd. company. All Rights Reserved.

8-17734S9-7 CIS PDF 07/2016

PCI, PCI Express, PCIe and PCI-SIG are trademarks of PCI-SIG.

TE connectivity and TE connectivity (logo) are trademarks. Other logos, product and / or company names might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change with notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

