



TE Connectivity Express Mini Card and Display Mini Card Sockets User Guide

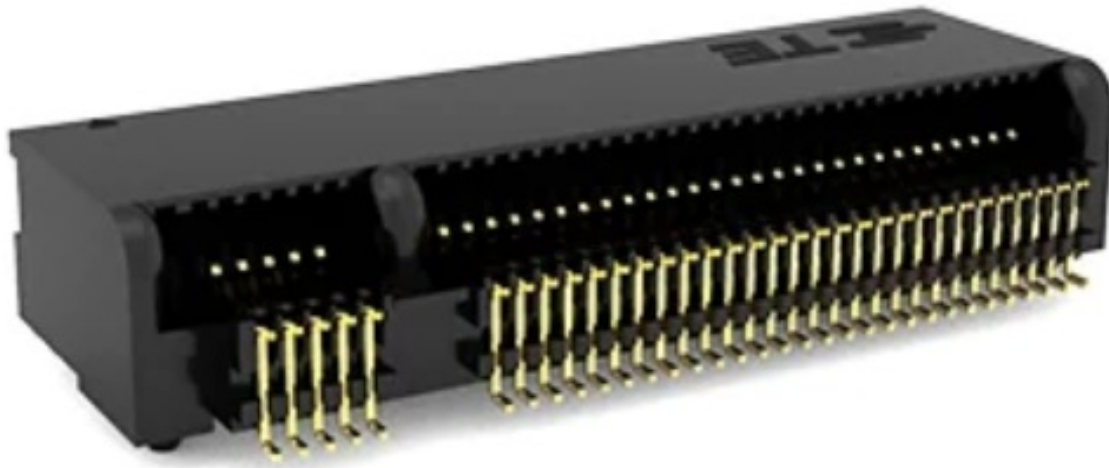
[Home](#) » [TE connectivity](#) » TE Connectivity Express Mini Card and Display Mini Card Sockets User Guide 

Contents

- [1 TE Connectivity Express Mini Card and Display Mini Card Sockets](#)
- [2 Instructions](#)
- [3 FEATURES & BENEFITS](#)
- [4 APPLICATIONS](#)
- [5 Product Sizes](#)
- [6 52 Position Express Mini Card Sockets](#)
- [7 76 Position DMC \(Display Mini Card\) Sockets](#)
- [8 Latches for Express Mini Card Sockets](#)
- [9 Frequently asked questions](#)
 - [9.1 FOR MORE INFORMATION](#)
- [10 Documents / Resources](#)
 - [10.1 References](#)
- [11 Related Posts](#)



TE Connectivity Express Mini Card and Display Mini Card Sockets



Instructions

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

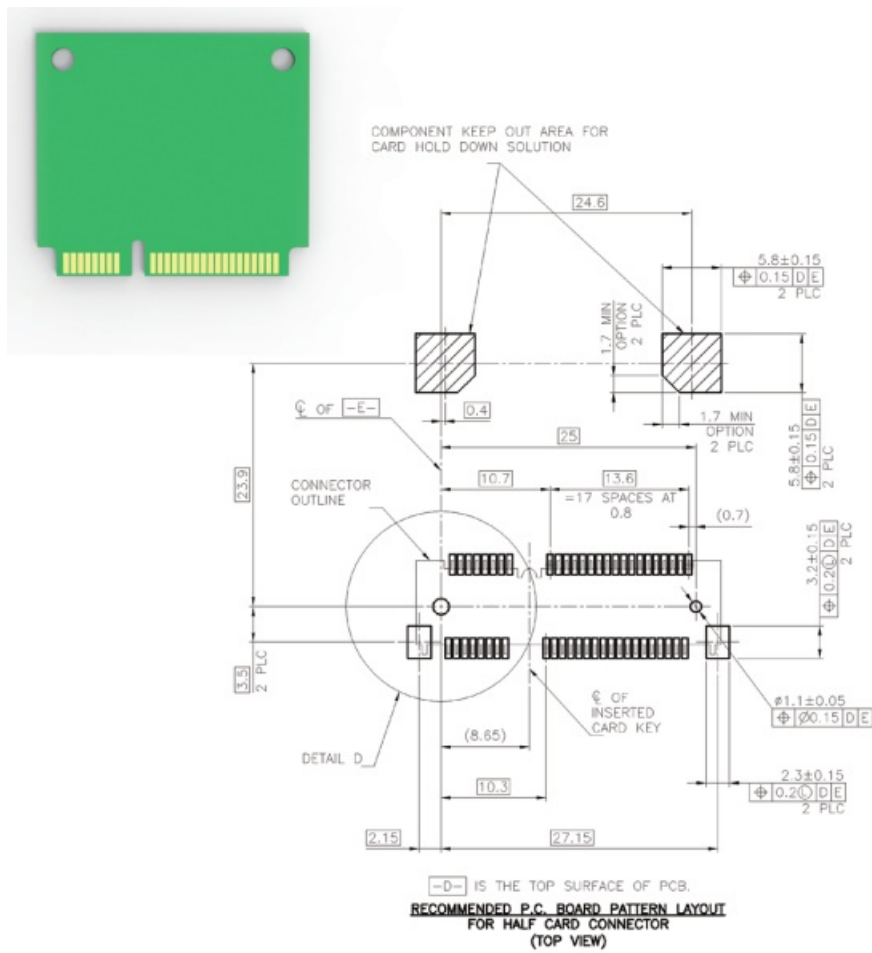
- Sockets available in heights from 4mm to 9.9 mm
- Capable of withstanding 50G mechanical shock testing
- Contact manufacturing method creates a contact with more stable normal force than other methods
- Compliant with PCI-SIG standard

APPLICATIONS

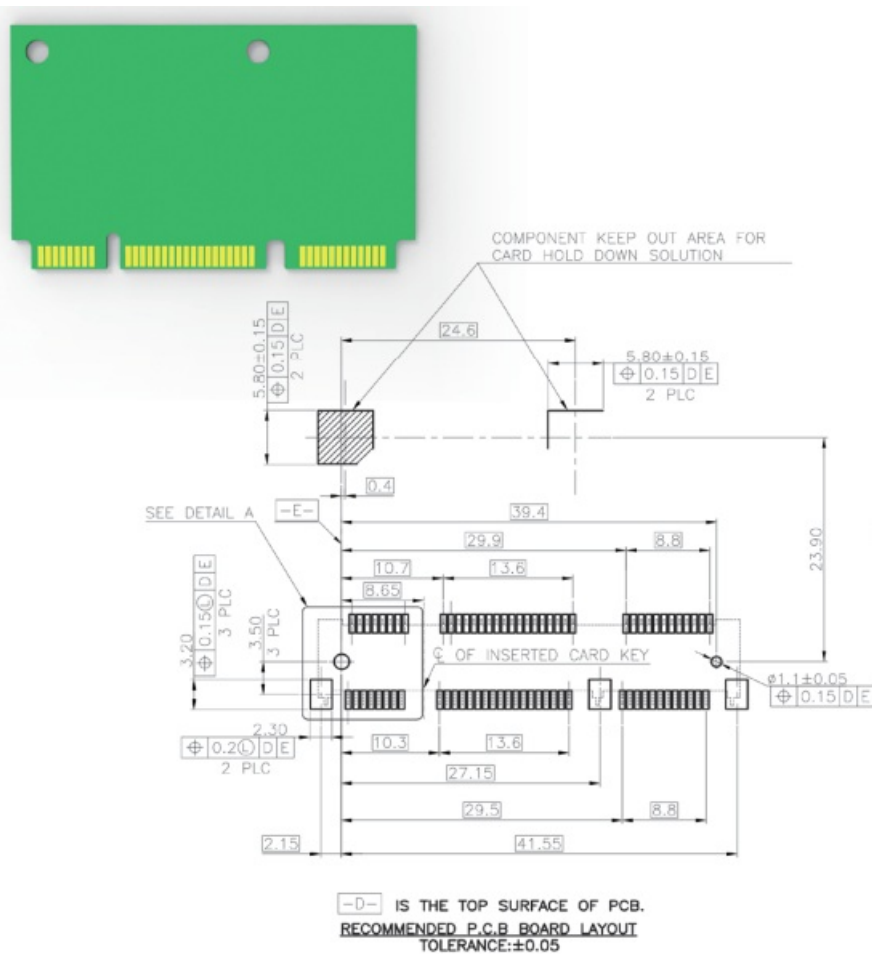
- Notebook PC
- Desktop PC
- Wireless Communication Equipment

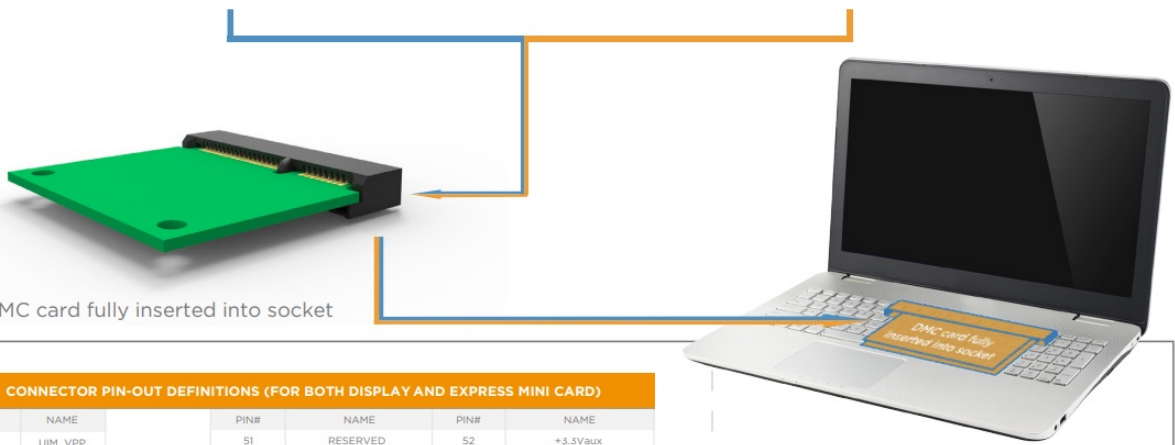
Product Sizes

Express Mini Card



Display Mini Card





DMC card fully inserted into socket

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

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Note: as defined www.te.com/leadfree

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8-17734S9-7 CIS PDF 07/2016

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Documents / Resources

	TE Connectivity Express Mini Card and Display Mini Card Sockets [pdf] User Guide Express Mini Card and Display Mini Card Sockets, Mini Card and Display Mini Card Sockets, Display Mini Card Sockets, Mini Card Sockets
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References

-  [Mini PCI Express & mSATA Connectors | TE Connectivity](#)

Manuals+.