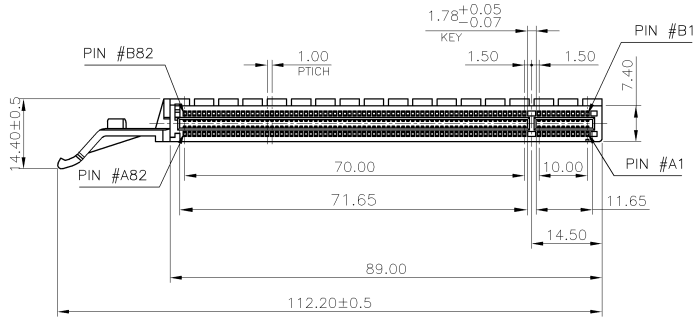
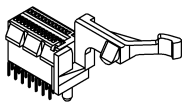
LOC	DIST
DW	—

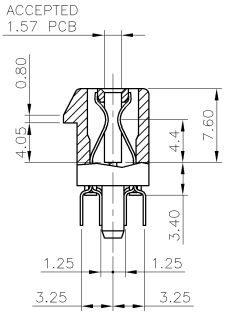
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	C2	REVISED (ECR-10-026203, UPDATE POST TOLERANCE)	22DEC'10	E.L.	W.K.

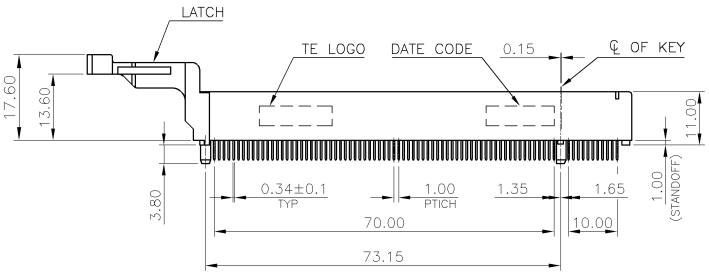


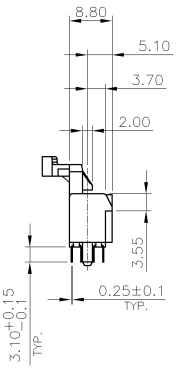


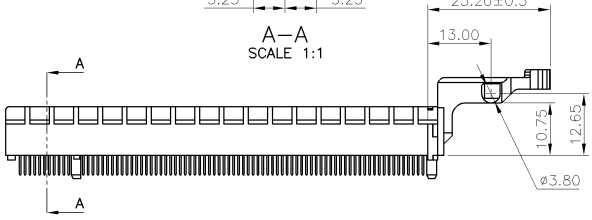
REFERENCE VIEW

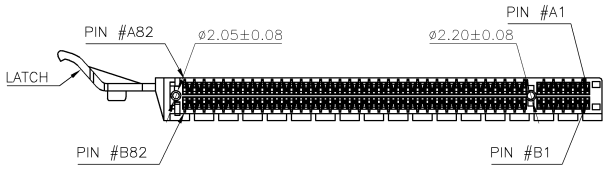


A–A
SCALE 1:1









GREEN (347C)	BLACK	0.381um [15u"]	1775793-5
WHITE	WHITE	0.381um [15u"]	1775793-4
BLACK	BLACK	0.762um [30u"]	1775793-3
		0.381um [15u"]	1775793-2
		0.0254um [1u"]	1775793-1
LATCH COLOR	HOUSING COLOR	MIN. GOLD THICKNESS	PART NUMBER

NOTE:
1. MATERIAL:
   HOUSING: PA46 WITH 40% GF, UL94 V-0, COLOR: (SEE TABLE).
   LATCH: PA66, UL94 V-0, COLOR: (SEE TABLE).
   CONTACTS: BRASS.
2. FINISH:
   CONTACTS: (SEE TABLE) MIN. GOLD PLATING ON CONTACE AREA.
   2.54um [100u"] MIN. MATTE-TIN PLATING ON SOLDER TAIL.
   1.27um [50u"] MIN. NICKEL UNDERPLATED OVERALL.
3. WAVE SOLDER CAPABLE TO 265°C PER TE TEST SPEC. 109-202, CONDITION B.

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± 0.3
2 PLC ± 0.2
3 PLC ± 0.15
4 PLC ± –
ANGLES ± 3°

MATERIAL: SEE NOTE
FINISH: SEE NOTE

DWN B. HSING 06MAY2009
CHK S. CHIEN 06MAY2009
APVD W. KODAMA 06MAY2009
PRODUCT SPEC 108-57704
APPLICATION SPEC —
WEIGHT 9.1 GRAMS

Tyco Electronics
Tyco Electronics Corporation
Taipei, Taiwan

NAME
PCI EXPRESS VERTICAL EDGE CARD CONNECTOR
164 POSITOIN, WITH LATCH

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-1775793	—

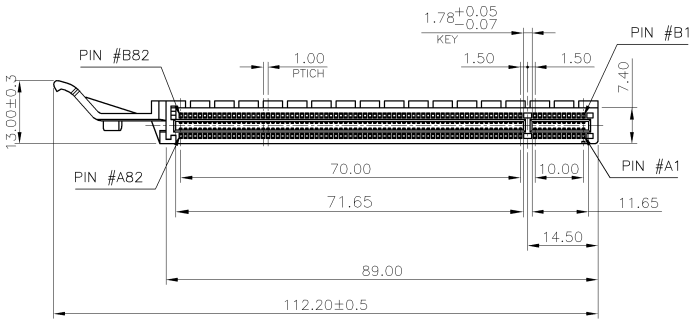
CUSTOMER DRAWING | SCALE — | SHEET 1 OF 5 | REV C2

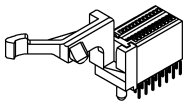
1470-19 (1/08)

LOC	DIST
DW	—

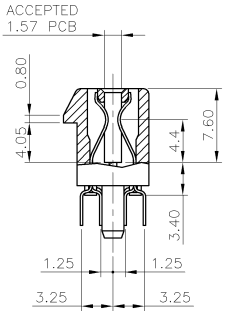
REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
		SEE SHEET 1.			

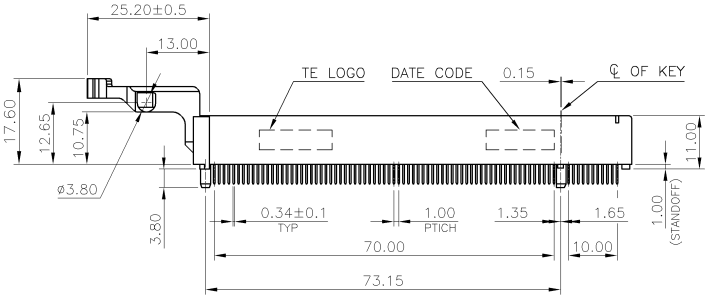


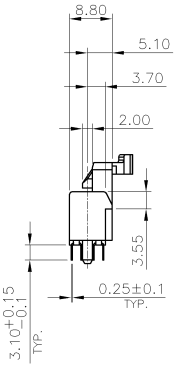


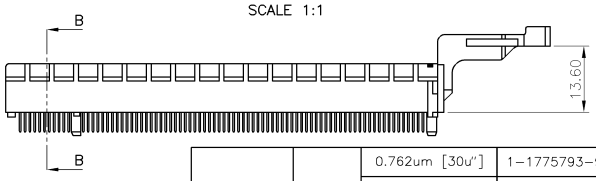
REFERENCE VIEW

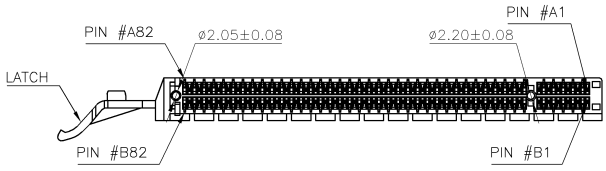


B–B
SCALE 1:1









NOTE:
1. MATERIAL:
   HOUSING: PA46 WITH 40% GF, UL94 V–0, COLOR: (SEE TABLE).
   LATCH: PA66, UL94 V–0, COLOR: (SEE TABLE).
   CONTACTS: BRASS.
2. FINISH:
   CONTACTS: (SEE TABLE) MIN. GOLD PLATING ON CONTACE AREA.
   2.54um [100u"] MIN. MATTE–TIN PLATING ON SOLDER TAIL.
   1.27um [50u"] MIN. NICKEL UNDERPLATED OVERALL.
3. WAVE SOLDER CAPABLE TO 265°C PER TE TEST SPEC. 109–202, CONDITION B.

LATCH COLOR	HOUSING COLOR	MIN. GOLD THICKNESS	PART NUMBER
GREEN (347C)	BLACK	0.762um [30u"]	1–1775793–9
		0.381um [15u"]	1–1775793–8
		0.0254um [1u"]	1–1775793–7
WHITE		0.762um [30u"]	1–1775793–6
		0.381um [15u"]	1–1775793–5
		0.0254um [1u"]	1–1775793–4
BLACK		0.762um [30u"]	1–1775793–3
		0.381um [15u"]	1–1775793–2
		0.0254um [1u"]	1–1775793–1

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	± –
1 PLC	± 0.3
2 PLC	± 0.2
3 PLC	± 0.15
4 PLC	± –
ANGLES	± 3°

MATERIAL: SEE NOTE

FINISH: SEE NOTE

DWN	–
CHK	–
APVD	–
PRODUCT SPEC	—
APPLICATION SPEC	—
WEIGHT	—

Tyco Electronics

Tyco Electronics Corporation
Taipei, Taiwan

NAME: PCI EXPRESS VERTICAL EDGE CARD CONNECTOR 164 POSITOIN, WITH LATCH

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-1775793	—

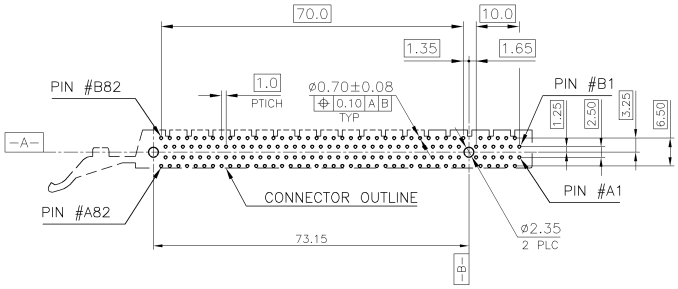
CUSTOMER DRAWING | SCALE — | SHEET 2 OF 5 | REV C2

1470–19 (1/08)

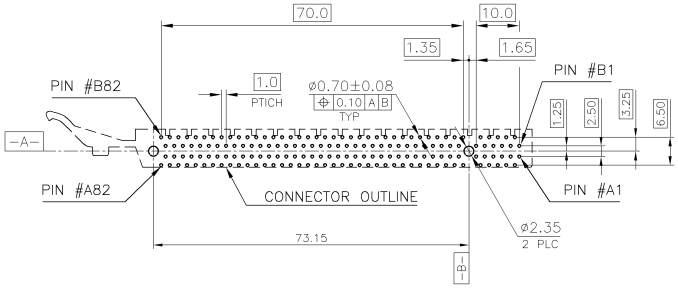
LOC	DIST
DW	—

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
		SEE SHEET 1.			



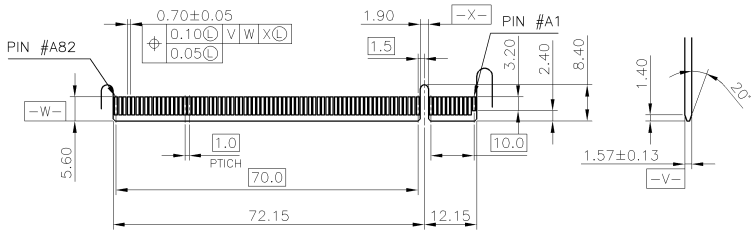
RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05
(APPLY TO P.C.B THICKNESS: 2.36mm)
FOR PART NO.: 1775793-1 TO -5



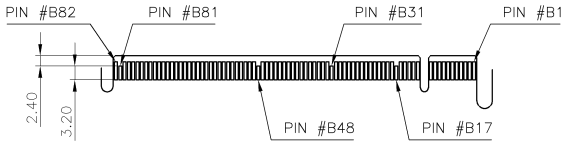
RECOMMENDED PCB LAYOUT
TOLERANCE: ±0.05
(APPLY TO P.C.B THICKNESS: 2.36mm)
FOR PART NO.: 1-1775793-1 TO 1-1775793-5

ADD-IN CARD EDGE-FINGER DIMENSIONS

NOTES:
CHAMFER EDGE MUST BE FREE OF CUTTING BURRS



I/O PANEL DIRECTION
PRIMARY (COMPONENT) SIDE



SECONDARY (SOLDER) SIDE

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	± -
1 PLC	± 0.3
2 PLC	± 0.2
3 PLC	± 0.15
4 PLC	± -
ANGLES	± 3°

MATERIAL —
FINISH —

DWN	—
CHK	—
APVD	—
PRODUCT SPEC	—
APPLICATION SPEC	—
WEIGHT	—

Tyco Electronics
Tyco Electronics Corporation
Taipei, Taiwan

NAME: PCI EXPRESS VERTICAL EDGE CARD CONNECTOR 164 POSITOIN, WITH LATCH

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-1775793	—

CUSTOMER DRAWING | SCALE — | SHEET 3 OF 5 | REV C2

1470-19 (1/08)

LOC	DIST
DW	—

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
		SEE SHEET 1.			

PIN #	Side B Name	Side B Description	Side A Name	Side A Description
1	+12V	12 V power	PRSNT1#	Hot-plug presence detect
2	+12V	12 V power	+12V	12 V power
3	+12V	12 V power	+12V	12 V power
4	GND	Ground	GND	Ground
5	SMCLK	SMBus (System Management Bus) clock	JTAG2	TCK (Test Clock), clock input for JTAG interface
6	SMDAT	SMBus (System Management Bus) data	JTAG3	TDI (Test Data Input)
7	GND	Ground	JTAG4	TDO (Test Data Output)
8	+3.3V	3.3 V power	JTAG5	TMS (Test Mode Select)
9	JTAG1	TRST# (Test Reset) resets the JTAG interface	+3.3V	3.3 V Power
10	3.3Vaux	3.3 V auxiliary power	+3.3V	3.3 V power
11	WAKE#	Signal for link reactivation	PERST#	Fundamental reset
Mechanical key				
12	RSVD	Reserved	GND	Ground
13	GND	Ground	REFCLK+	Reference clock (differential pair)
14	PETp0	Transmitter differential pair, Lane 0	REFCLK-	
15	PETn0		GND	Ground
16	GND	Ground	PERp0	Receiver differential pair, Lane 0
17	PRSNT2#	Hot-plug presence detect	PERn0	
18	GND	Ground	GND	Ground
End of the x1 connector				

PIN #	Side B Name	Side B Description	Side A Name	Side A Description
19	PETp1	Transmitter differential pair, Lane 1	RSVD	Reserved
20	PETn1		GND	Ground
21	GND	Ground	PERp1	Receiver differential pair, Lane 1
22	GND	Ground	PERn1	
23	PETp2	Transmitter differential pair, Lane 2	GND	Ground
24	PETn2		GND	Ground
25	GND	Ground	PERp2	Receiver differential pair, Lane 2
26	GND	Ground	PERn2	
27	PETp3	Transmitter differential pair, Lane 3	GND	Ground
28	PETn3		GND	Ground
29	GND	Ground	PERp3	Receiver differential pair, Lane 3
30	RSVD	Reserved	PERn3	
31	PRSNT2#	Hot-plug presence detect	GND	Ground
32	GND	Ground	RSVD	Reserved
End of the x4 connector				

PIN #	Side B Name	Side B Description	Side A Name	Side A Description
33	PETp4	Transmitter differential pair, Lane 4	RSVD	Reserved
34	PETn4		GND	Ground
35	GND	Ground	PERp4	Receiver differential pair, Lane 4
36	GND	Ground	PERn4	
37	PETp5	Transmitter differential pair, Lane 5	GND	Ground
38	PETn5		GND	Ground
39	GND	Ground	PERp5	Receiver differential pair, Lane 5
40	GND	Ground	PERn5	
41	PETp6	Transmitter differential pair, Lane 6	GND	Ground
42	PETn6		GND	Ground
43	GND	Ground	PERp6	Receiver differential pair, Lane 6
44	GND	Ground	PERn6	
45	PETp7	Transmitter differential pair, Lane 7	GND	Ground
46	PETn7		GND	Ground
47	GND	Ground	PERp7	Receiver differential pair, Lane 7
48	PRSNT2#	Hot-plug presence detect	PERn7	
49	GND	Ground	GND	Ground
End of the x8 connector				

PIN #	Side B Name	Side B Description	Side A Name	Side A Description
50	PETp8	Transmitter differential pair, Lane 8	RSVD	Reserved
51	PETn8		GND	Ground
52	GND	Ground	PERp8	Receiver differential pair, Lane 8
53	GND	Ground	PERn8	
54	PETp9	Transmitter differential pair, Lane 9	GND	Ground
55	PETn9		GND	Ground
56	GND	Ground	PERp9	Receiver differential pair, Lane 9
57	GND	Ground	PERn9	
58	PETp10	Transmitter differential pair, Lane 10	GND	Ground
59	PETn10		GND	Ground
60	GND	Ground	PERp10	Receiver differential pair, Lane 10
61	GND	Ground	PERn10	
62	PETp11	Transmitter differential pair, Lane 11	GND	Ground
63	PETn11		GND	Ground
64	GND	Ground	PERp11	Receiver differential pair, Lane 11
65	GND	Ground	PERn11	
66	PETp12	Transmitter differential pair, Lane 12	GND	Ground
67	PETn12		GND	Ground
68	GND	Ground	PERp12	Receiver differential pair, Lane 12
69	GND	Ground	PERn12	
70	PETp13	Transmitter differential pair, Lane 13	GND	Ground
71	PETn13		GND	Ground
72	GND	Ground	PERp13	Receiver differential pair, Lane 13
73	GND	Ground	PERn13	
74	PETp14	Transmitter differential pair, Lane 14	GND	Ground
75	PETn14		GND	Ground
76	GND	Ground	PERp14	Receiver differential pair, Lane 14
77	GND	Ground	PERn14	
78	PETp15	Transmitter differential pair, Lane 15	GND	Ground
79	PETn15		GND	Ground
80	GND	Ground	PERp15	Receiver differential pair, Lane 15
81	PRSNT2#	Hot-plug presence detect	PERn15	
82	RSVD	Reserved	GND	Ground
End of the x16 connector				

PCI Express Connector Pinout

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:

0 PLC	± –
1 PLC	± 0.3
2 PLC	± 0.2
3 PLC	± 0.15
4 PLC	± –
ANGLES	± 3°

MATERIAL: –

FINISH: –

DWN	–
CHK	–
APVD	–
PRODUCT SPEC	—
APPLICATION SPEC	—
WEIGHT	—

Tyco Electronics

Tyco Electronics Corporation
Taipei, Taiwan

NAME: PCI EXPRESS VERTICAL EDGE CARD CONNECTOR 164 POSITOIN, WITH LATCH

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-1775793	—

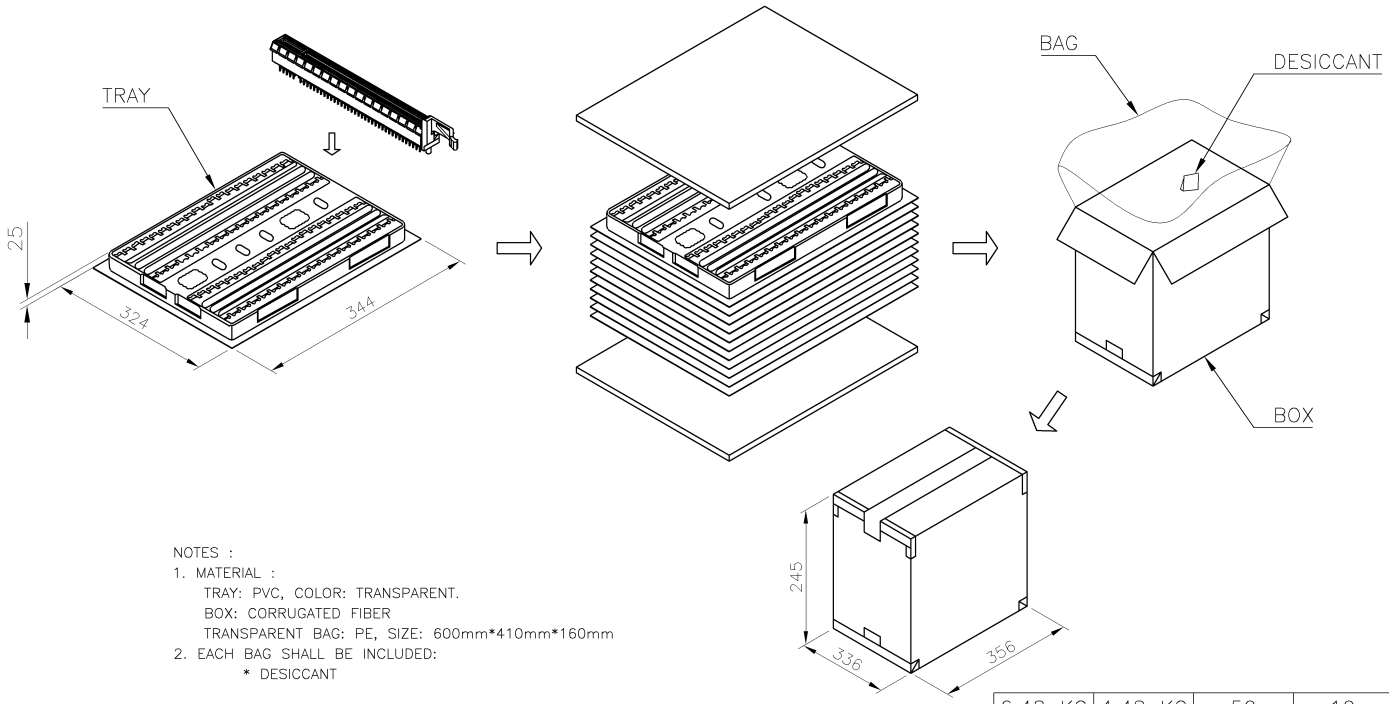
CUSTOMER DRAWING | SCALE — | SHEET 4 OF 5 | REV C2

1470–19 (1/08)

LOC	DIST
DW	—

REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
		SEE SHEET 1.			



NOTES :
1. MATERIAL :
   TRAY: PVC, COLOR: TRANSPARENT.
   BOX: CORRUGATED FIBER
   TRANSPARENT BAG: PE, SIZE: 600mm*410mm*160mm
2. EACH BAG SHALL BE INCLUDED:
   * DESICCANT

6.48 KG	4.48 KG	50	10	500
GROSS WEIGHT	NET WEIGHT	PCS/ TRAY	TRAY/ BOX	PCS/ BOX

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TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± –
1 PLC ± 0.3
2 PLC ± 0.2
3 PLC ± 0.15
4 PLC ± –
ANGLES ± 3°

MATERIAL –
FINISH –

DWN –
CHK –
APVD –
PRODUCT SPEC –
APPLICATION SPEC –
WEIGHT –

Tyco Electronics
Tyco Electronics Corporation
Taipei, Taiwan

NAME
PCI EXPRESS VERTICAL EDGE CARD CONNECTOR
164 POSITOIN, WITH LATCH

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-1775793	–

CUSTOMER DRAWING | SCALE – | SHEET 5 OF 5 | REV C2

1470-19 (1/08)