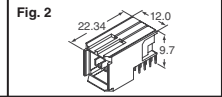
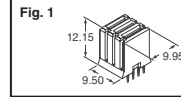


**Material and Finish:** • Housing: PBT, Natural Color, UL 94V-0

**Specifications:** • Durability: 250 Cycles  
• Vertical Standard Power 10A • Right Angle High Power 16A

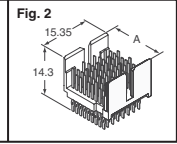
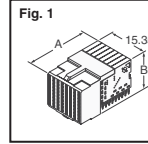
Fig.	Description	Digi-Key Part No.	Price Each		Tyco Electronics Part No.
			1	25	
1	Vertical Receptacle	A97882-ND	4.63	4.19	5223955-2
2	Right Angle Header	A97883-ND	4.84	4.39	5223961-1



**Z-PACK™ TinMan Connectors**

**Material and Finish:** • Contact: High Strength Copper Alloy • Housing: Liquid Crystal Polymer  
**Specifications:** • 10+ Gbps performance • 100Ω Impedance for differential pair configuration • 5 pair version offers 26 pairs/10mm (66 differential pairs/inch) fitting within a 25.40 (1.00) card slot pitch • 3 pair version offering 16 pairs/10mm (40 differential pairs/inch) fitting within a 16.25 (.625) card slot pitch • Reliable, redundant contact design on every signal contact • Meets industry reliability requirements of Bellcore/Telcordia • Sequencing for ground and signal contacts

Fig.	Description	Dim. - mm		Digi-Key Part No.	Price Each		Tyco Electronics Part No.
		A	B		1	25	
1	Receptacle 5x8	31.81	24.4	A99839-ND	11.60	10.48	1934218-1
	Receptacle 3x8	23.41	16.0	A99840-ND	8.98	8.09	1934226-1
2	Header 5x8	24.40	—	A99841-ND	7.35	6.62	1934269-1
	Header 3x8	16.00	—	A99842-ND	4.42	3.98	1934299-1

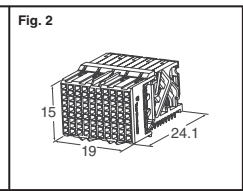
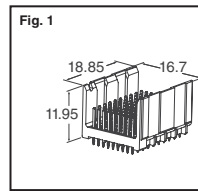


**Z-PACK™ Impact™ High Density Backplane Connectors**

Designed for increased speed and density to meet the future system upgrades and next generation requirements of data networking and telecommunications equipment. The Impact connector design system contains a unique broad-edge coupled design which utilizes low impedance, localized ground return path in an optimized differential pair array. Additionally, differential pairs are tightly coupled and surrounded by ground structures to isolate the pairs, which in turn reduces crosstalk and increases overall bandwidth performance with minimal performance variance.

**Features:** • 25Gb/s performance • 100Ω Impedance • Built in guidance available for improved mating alignment and to maximize available PCB real estate  
**Applications:** Ideal for high speed, backplane applications: • Switches • Servers/Blade Servers • Routers • Storage

Fig.	Description	Digi-Key Part No.	Price Each			Tyco Electronics Part No.
			1	25	50	
1	Header 3x10	A100860-ND	8.24	7.42	6.60	2007788-2
2	Receptacle 3x10	A100861-ND	12.37	11.14	9.90	2007705-1



**VITA 41/46 Connectors**

**VITA 41** is an ANSI standard that combines parallel VMEbus with enhancements to support switched serial fabrics including PCI Express, RapidIO, StarFabric and InfiniBand over a new high speed P0 connector. Backward compatibility is maintained with existing backplanes that do not have a conflicting P0 scheme. Combining the VME2eSST parallel bus with switch fabric technologies for multi-point, high-speed data transfers creates choices for embedded computing designs of all types. The standard also incorporates ANSI/VITA 1.7, allowing more DC power input into each board.

**MULTIGIG RT @ VITA 46** Compliant Backplane Connector System represents the leading edge of avionics and vehtronics backplane connector technology. Originally chosen for the VITA 41 VX5 standard, the connector was again chosen and evolved by the VITA 46 VPX working group for rugged applications demanding extreme electrical and mechanical performance. The connector features the highest data rate for a ruggedized connector and unique physical attributes making it suitable for mobile and level 2 maintenance applications.

**Features:** • Pinless daughtercard • Printed circuit board style wafers for unique resistance to damage • Ease of reconfiguration and integration of ESD features • Backplane half of the connector features shrouded contacts eliminating the potential for contact damage • Rated to 6.4Gb/s in support of the VITA 46 document, the connector has been demonstrated to support data rates greater than 10Gb/s



Fig. 1 — VITA 41 Payload Board and Payload Slot

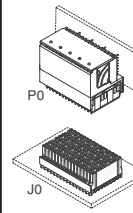


Fig. 2 — VITA 41 Rear Transition Module

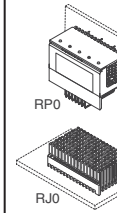


Fig. 3 — VITA 41 Switch Board and Switch Slot

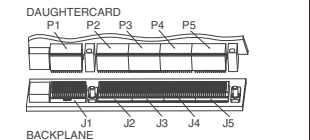
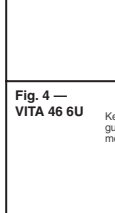


Fig. 4 — VITA 46 BU

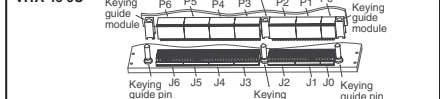


Fig.	Description	Location	Digi-Key Part No.	Price Each			Tyco Electronics Part No.
				1	25	100	
<b>VITA 41</b>							
1	Daughtercard Backplane	P0	A99168-ND	87.88	79.59	56.38	1410147-1
		J0	A99164-ND	26.91	24.37	17.27	1410135-1
2	Daughtercard Backplane	RP0	A99173-ND	67.02	60.70	43.00	1410303-1
		RJ0	A99167-ND	18.74	16.98	12.03	1410992-3
3	Backplane Daughtercard	J1	A99165-ND	31.64	28.66	20.30	1410420-1
		J5	A99166-ND	27.92	25.30	17.92	1410141-1
		P1	A99169-ND	98.19	88.93	63.00	1410421-1
		P2	A99170-ND	98.66	89.35	63.29	1410139-1
		P3, P4	A99171-ND	98.44	89.16	63.16	1410137-1
		P5	A99172-ND	98.55	89.26	63.23	1410138-1
<b>VITA 41/46</b>							
4	Backplane	J0	A99136-ND	16.13	14.61	10.35	1410186-1
3	Backplane	J3, J4	A99137-ND	27.92	25.30	17.92	1410140-1
4	Backplane	J1, J3, J4, J5	A99138-ND	27.92	25.30	17.92	1410142-1
3	Backplane	J2	A99138-ND	27.92	25.30	17.92	1410142-1
4	Backplane	J2, J6	A99138-ND	27.92	25.30	17.92	1410142-1
<b>VITA 46</b>							
4	Daughtercard Daughtercard Daughtercard Backplane	P0	A99142-ND	57.70	52.26	37.02	1410189-3
		P1, P2, P3, P4, P5, P6	A99143-ND	111.82	101.27	71.74	1410187-3
		P2, P3, P4, P5, P6	A99144-ND	111.82	101.27	71.74	1410190-3
		Key Guided Pin	A99152-ND	4.46	4.04	2.86	1-1469491-2

Fig.	Description	Location	Digi-Key Part No.	Price Each			Tyco Electronics Part No.
				1	25	100	
4	Backplane Backplane	Key Guided Pin	A99153-ND	4.52	4.10	2.90	1-1469491-3
		Key Guided Pin	A99154-ND	4.52	4.10	2.90	1-1469491-4
—	Key Guided Pin Kit	Midplane	A99155-ND	57.09	51.70	36.63	1410956-1
4	Module Key Guide Daughtercard	0°	A99156-ND	5.79	5.25	3.72	1-1469492-1
		45°	A99157-ND	5.79	5.25	3.72	1-1469492-2
		90°	A99158-ND	5.79	5.25	3.72	1-1469492-3
		270°	A99159-ND	5.79	5.25	3.72	1-1469492-7
		315°	A99160-ND	5.79	5.25	3.72	1-1469492-8
—	Without Keying	Module Key Guide Daughtercard	A99161-ND	.92	5.37	3.80	1-1469492-9
—	3.5mm	Module Retaining Screw	A99162-ND	.77	.70	.50	1410946-1
—	5.5mm	Module Retaining Screw	A99163-ND	4.24	3.85	2.73	1410946-2
<b>7 Row VITA 46</b>							
—	Backplane Backplane Backplane Daughtercard Daughtercard	Center	A99139-ND	27.97	25.34	17.95	1410964-1
		Center	A99140-ND	20.35	18.44	13.06	1410965-1
		Center	A99141-ND	21.67	19.63	13.90	1410966-1
		Right End	A99145-ND	112.47	101.87	72.16	1410188-3
		Right End	A99146-ND	112.47	101.87	72.16	1410191-3
		Center	A99147-ND	106.26	96.24	68.17	1410968-3
—	Daughtercard Daughtercard Daughtercard Daughtercard	Center	A99148-ND	111.62	101.10	71.61	1410970-3
		Half Left End	A99149-ND	61.09	55.34	39.20	1410971-3
		Half Left End	A99150-ND	57.98	52.51	37.20	1410972-3
		Center	A99151-ND	111.42	100.91	71.48	1410975-3

**.050 Series PCI Connectors**

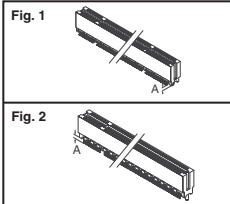
**Product Facts:**

• High density .050 [1.27] centerline contact spacing • Easy mating of high circuit count daughter boards • Polarizing web for positive board-to-connector registration

**Performance Characteristics:**

• **Durability:** Tested to 100 mating cycles • **Current Rating:** 1A maximum • **Voltage Rating:** 203VAC • **Thermal Shock:** -55°C ~ 85°C for 5 cycles

Fig.	No. of Dual Positions	Dim. A Inch (mm)	Digi-Key Part No.	Price Each		Tyco Electronics Part No.
				1	25	
1	92	.095 (2.41)	A97895-ND	5.26	3.30	6489934-1
	60	.180 (4.57)	A97907-ND	3.20	2.01	5145098-1
	60	.100 (2.54)	A97905-ND	3.08	1.93	5145154-4
2	60	.125 (3.18)	A97906-ND	3.08	1.93	5145154-8
	92	.100 (2.54)	A97908-ND	3.16	1.99	5145165-4



**PCI Express Connectors**

Tyco Electronics Card Edge Connector for PCI Express applications is a 1mm centerline card edge product designed to meet PCI SIG requirements for PCI Express architecture. PCI Express architecture is a high performance point to point full duplex I/O Bus.

**Ratings:** • **Operating:** -40°C ~ 85°C • **Durability:** 50 Cycles • **Current Rating:** 1.1A • **Voltage Rating:** 50VAC

No. of Dual Positions	Dim. A - mm	Digi-Key Part No.	Price Each		Tyco Electronics Part No.
			1	25	
32	39	A97898-ND	1.21	.76	2-1612163-2
18	25	A97897-ND	.91	.58	4-1612163-1
49	56	A97899-ND	1.93	1.21	4-1612163-3
82	89	A97900-ND	3.27	2.05	4-1612163-4
18	25	A97901-ND	.94	.59	5-1612163-1
32	39	A97902-ND	1.40	.88	5-1612163-2
49	56	A97903-ND	1.93	1.21	5-1612163-3
82	89	A97904-ND	3.14	1.97	5-1612163-4

