



Scorpion

PICMG 3.8 POWER CONNECTOR



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Positronic's Scorpion Series chosen for PICMG 3.8

AdvancedTCA was developed to define next generation carrier-grade telecommunications equipment. ATCA architecture enables increased mobility and improves reliability, availability, and serviceability. The ATCA specification allows the standard to keep up with an evolving and competitive industry.

One of the latest ATCA evolutions is the PICMG 3.8 standard. PICMG 3.8 specifies Zone 3 requirements for rear transition modules in ATCA systems. The standard also addresses power, cooling, and keying issues. This addition to the family of PICMG standards supports the use of ATCA in a variety of applications outside of telecommunications.

One of the key features of PICMG 3.8 is the definition of a power and system management connector. This allows a consistent means of supporting generic system requirements, while allowing the flexibility to utilize application specific connectors as needed.

Positronic's Scorpion connector series was chosen as the power and system management connector for the 3.8 standard. The Scorpion's high-density packaging of miniature power contacts made it the preferred choice for this application.

The PICMG 3.8 power connector has 16 contacts rated at 3 amperes each at a maximum temperature rise of 30 degrees C; all contacts energized. Contact resistance is 6 milliohms maximum. The connector package offers blind mating capability and is only 19.8 mm wide. Contact termination types include right angle solder and straight press-fit.

[View Scorpion Catalog](#)

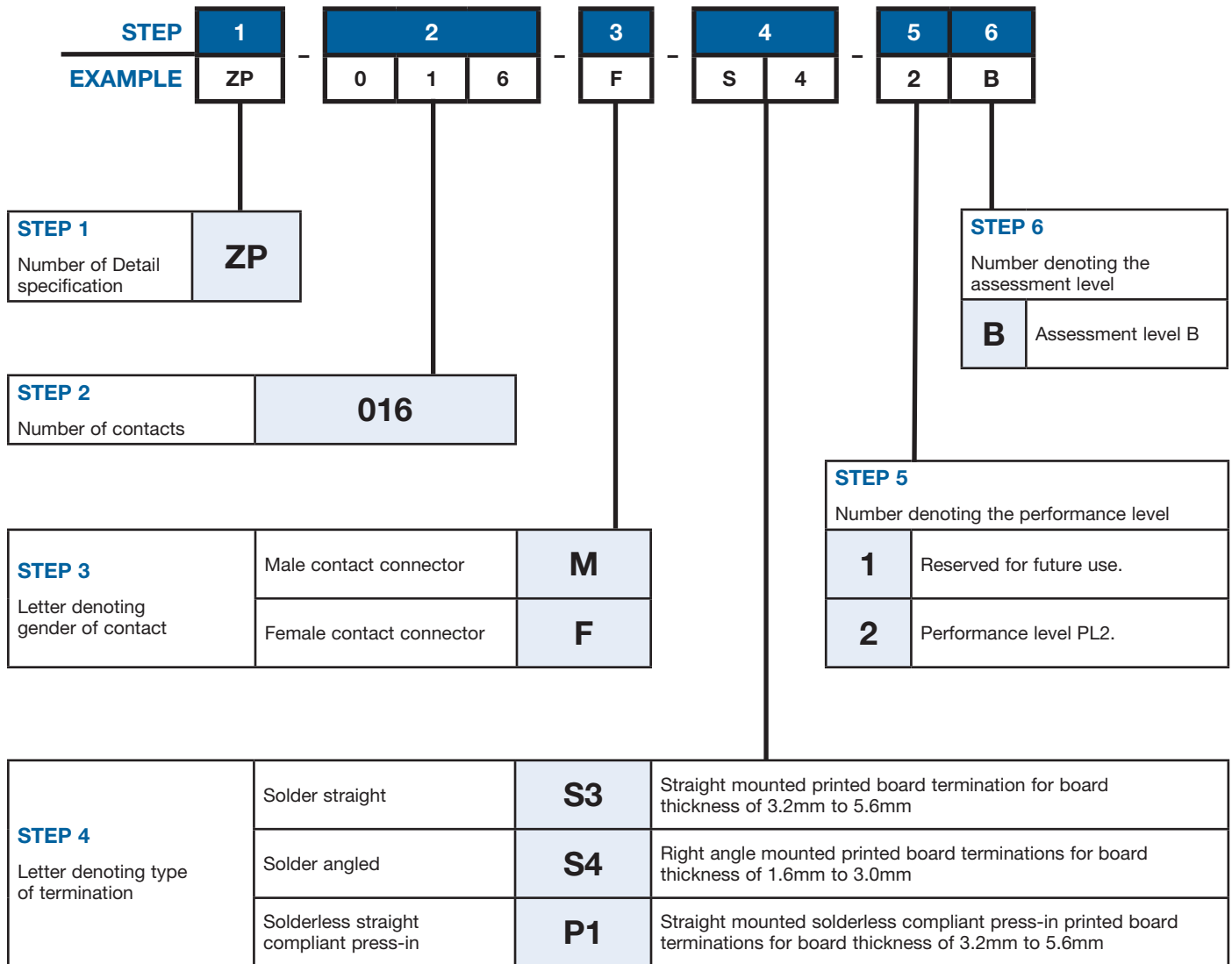
Positronic Industries
www.connectpositronic.com
www.positronicasia.com





ORDERING INFORMATION - CODE NUMBERING SYSTEM FOR PICMG 3.8 POWER CONNECTORS

Specify Complete Connector By Selecting An Option From Step 1 Through 6



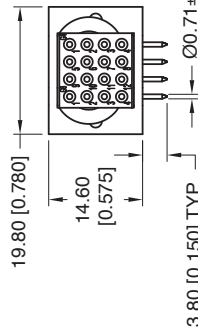
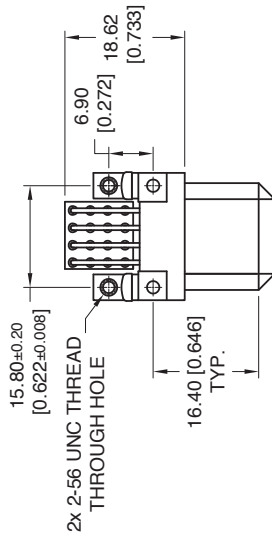
The 3.8 specification has it's own part number system. For your convenience, here is a cross reference to Positronic part numbers.

PART NUMBER CROSS REFERENCE			
GENDER / TERMINATION	PICMG PART NUMBER	POSITRONIC PART NUMBER	2-D DRAWING
female / right angle	ZP-016F-S4-2B	SP7KH4F0BS0A1/AA-PA778	See page 20
male / right angle	ZP-016M-S4-2B	SP7KH4M0BS0A1/AA-PA778	See page 21
male / straight compliant press-in	ZP-016M-P1-2B	SP7KH93M0000A1/AA-PA778	See page 22

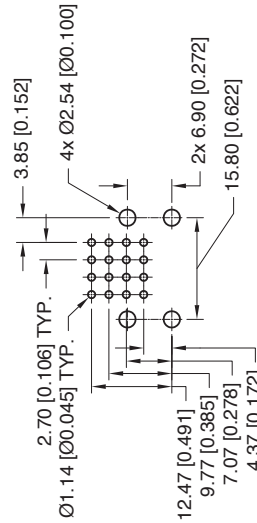


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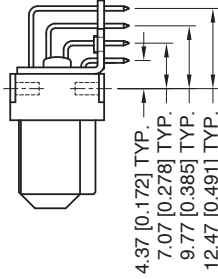
DATE	REV	REVISION RECORD	DRN	CKD	APP
09 Jun 10	E	PA ECO 10123	LP	RG	NK
23 Dec 10	F	PA ECO 10273	LP	EH	NK
04 Mar 11	G	PA ECO 11039	LP	EH	NK



CONTACT HOLES PATTERN



SIZE 22 CONTACTS



DRAWING NO.	ORDERING PART NUMBER	REMARKS
ASK22140-1	SP7KH4F0BS0A1-PA778	-
ASK22140-2	SP7KH4F0BS0A1/AA-PA778	RoHS COMPLIANT PER RoHS DIRECTIVE 2002/95/EC OF 27 JAN 200

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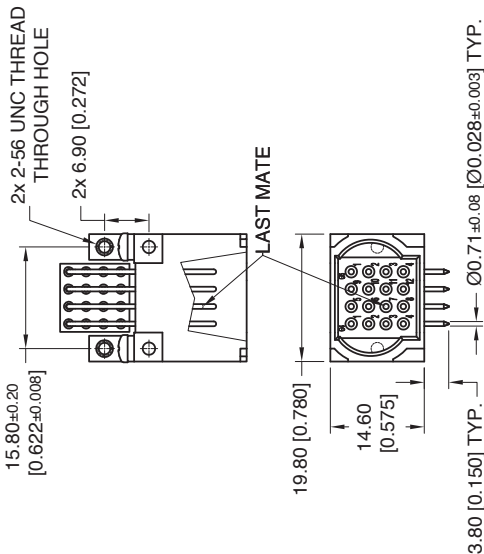
GENERAL TOL. LINEAR : ±0.38 [0.015] ANGULAR : ± 3°	SERIES SP	SCALE NTS	DRAWN LP	CHECKED EH	APPROV KV
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS (INCHES)	TITLE Physics xTCA Zone 3 Power		DRAWING NUMBER 03 SEP 09 ASK22140-*		
FEMALE RIGHT ANGLE SOLDER FRONT BOARD CONNECTOR			SHEET 1 OF 1		

- NOTES:**
- MATERIALS AND FINISHES
 INSULATOR: GLASS-FILLED POLYESTER, UL 94V-0. COLOR: BLUE.
 CONTACTS: PRECISION MACHINED COPPER ALLOY WITH GOLD OVER NICKEL PLATE.
 ANGLE BRACKETS: BRASS, TIN PLATE OVER NICKEL.
 SCREWS: STEEL, ZINC PLATE WITH CHROMATE SEAL.
 - THIS MOS ALLOWS THE CONNECTOR TO BE PROVIDED WITH SPECIAL CONTACTS AT ALL POSITIONS.
 - DETAILED PRODUCT, ELECTRICAL, AND MECHANICAL INFORMATION IS AVAILABLE IN THE LATEST STANDARD SCORPION PRODUCT PUBLICATION. VISIT CONNECTPOSITRONIC.COM/PRODUCTS/146/SCORPION OR CONNECTPOSITRONIC.COM.

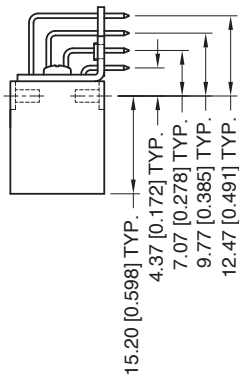


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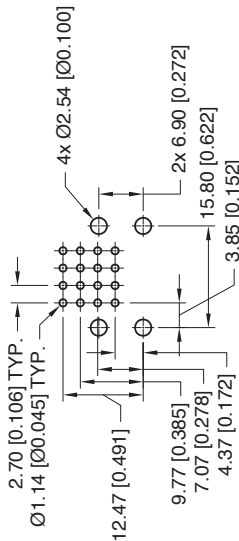
DATE	REV	REVISION RECORD	DRN	CKD	APP
09 Jan 10	E	PA ECO 10123	LP	RG	NK
23 Dec 10	F	PA ECO 10273	LP	EH	NK
28 Feb 11	G	PA ECO 11030	LP	EH	NK



SIZE 22 CONTACTS



CONTACT HOLES PATTERN



NOTES:

- MATERIALS AND FINISHES
INSULATOR: GLASS-FILLED POLYESTER, UL-94V-0. COLOR: BLUE.
CONTACTS: PRECISION MACHINED COPPER ALLOY WITH GOLD OVER NICKEL PLATE.
ANGLE BRACKETS: BRASS, TIN PLATE OVER NICKEL.
SCREWS: STEEL, ZINC PLATE WITH CHROMATE SEAL.
- THIS MOS ALLOWS THE CONNECTOR TO BE PROVIDED WITH 3.50mm MATING LENGTH AT POSITION 7 OF MODULE G4. 5.00mm MATING LENGTH AT ALL OTHER POSITIONS.
- DETAILED PRODUCT, ELECTRICAL, AND MECHANICAL INFORMATION IS AVAILABLE IN THE LATEST STANDARD SCORPION PRODUCT PUBLICATION. VISIT CONNECTPOSITRONIC.COM/PRODUCTS/146/SCORPION OR CONNECTPOSITRONIC.COM.

DRAWING NO.	ORDERING PART NUMBER	REMARKS
ASK22141-1	SP7KH4M0BS0A1-PA778	-
ASK22141-2	SP7KH4M0BS0A1/AA-PA778	RoHS COMPLIANT PER RoHS DIRECTIVE 2002/95/EC OF 27 JAN 2001

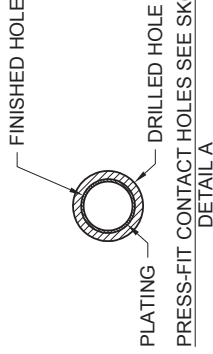
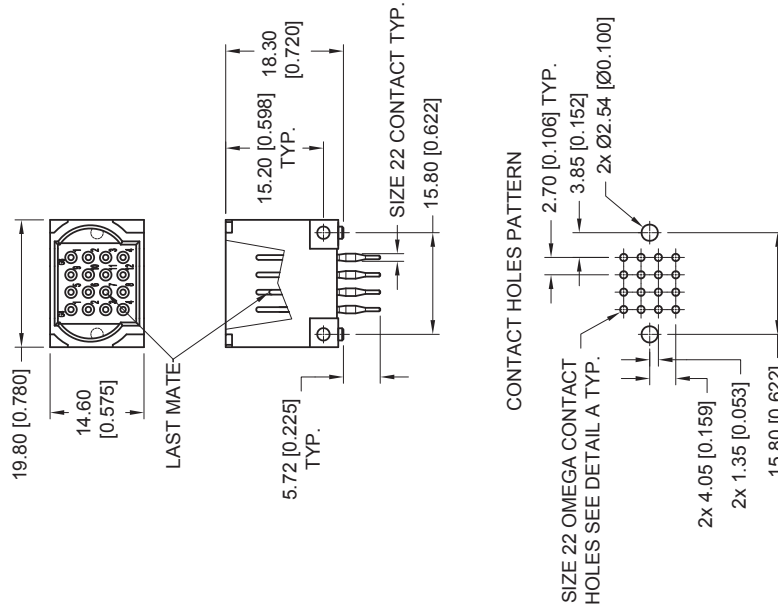
		POSITRONIC ASIA PTE. LTD	
Email: singapore@connectpositronic.com For more information, please visit website at www.connectpositronic.com			
GENERAL TOL.	SCALE	DRAWN	CHECKED/APPROV
LINEAR : ±0.38 [0.015]	NTS	LP	EH
ANGULAR : ± 9°	SP	LP	KV
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS IN MILLIMETERS (INCHES)	TITLE	DRAWING NUMBER	REV.
	Physics xTCA Zone 3 Power	ASK22141-*	1
	Male right angle solder RTM connector	02 Sep 09	G
		SHEET 1 OF 1	



ASK22139-* SHEET 1 OF 1

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DATE	REV	REVISION RECORD	DRN	CHK	APP
09 Jun 10	D	PA ECO 10123	LP	RG	NK
23 Dec 10	E	PA ECO 10273	LP	EH	NK
28 Feb 11	F	PA ECO 11030	LP	EH	NK



DRAWING NO.	ORDERING PART NUMBER	REMARKS
ASK22139-1	SP7KH93M000A1-PA778	-
ASK22139-2	SP7KH93M000A1/AA-PA778	RoHS COMPLIANT PER RoHS DJRECTIVE 2002/95/EC OF 27 JAN 200

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	SERIES	SCALE	DRAWN	CHECKED	APPROV
	SP	NTS	LP	EH	KV
GENERAL TOL.	TITLE				
LINEAR : ±0.38 [0.015]	Physics xTCA Zone 3 Power				
ANGULAR : ± 9°	Male press fit backplane power connector				
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS IN MILLIMETERS (INCHES)	DATE	DRAWING NUMBER	REV.		
	02 Sep 09	ASK22139-*	SHEET 1 OF 1		

NOTES:

- 1) MATERIALS AND FINISHES
INSULATOR: GLASS-FILLED POLYESTER, UL 94V-0. COLOR: BLUE.
CONTACTS: PRECISION MACHINED COPPER ALLOY WITH GOLD OVER NICKEL PLATE.
- 2) THIS MOS ALLOWS THE CONNECTOR TO BE PROVIDED WITH 3.50mm MATING LENGTH AT POSITION 7 OF MODULE G4, 5.00mm MATING LENGTH AT ALL OTHER POSITIONS
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