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.
ORDERING INFORMATION - CODE NUMBERING SYSTEM
FOR PICMG 3.8 POWER CONNECTORS
Specify Complete Connector By Selecting An Option From Step 1 Through 6

STEP 1
Number of Detail specification
ZP

STEP 2
Number of contacts
016

STEP 3
Letter denoting gender of contact
Male contact connector M
Female contact connector F

STEP 4
Letter denoting type of termination
Solder straight S3 Straight mounted printed board termination for board thickness of 3.2mm to 5.6mm
Solder angled S4 Right angle mounted printed board terminations for board thickness of 1.6mm to 3.0mm
Solderless straight compliant press-in P1 Straight mounted solderless compliant press-in printed board terminations for board thickness of 3.2mm to 5.6mm

STEP 5
Number denoting the performance level
1 Reserved for future use.
2 Performance level PL2.

STEP 6
Number denoting the assessment level
B Assessment level B

PART NUMBER CROSS REFERENCE

<table>
<thead>
<tr>
<th>GENDER / TERMINATION</th>
<th>PICMG PART NUMBER</th>
<th>POSITRONIC PART NUMBER</th>
<th>2-D DRAWING</th>
</tr>
</thead>
<tbody>
<tr>
<td>female / right angle</td>
<td>ZP-016F-S4-2B</td>
<td>SP7KH4F0BS0A1/AA-PA778</td>
<td>See page 20</td>
</tr>
<tr>
<td>male / right angle</td>
<td>ZP-016M-S4-2B</td>
<td>SP7KH4M0BS0A1/AA-PA778</td>
<td>See page 21</td>
</tr>
</tbody>
</table>

The 3.8 specification has its own part number system. For your convenience, here is a cross reference to Positronic part numbers.
NOTES:

1) 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.

2) THIS MOS ALLOWS THE CONNECTOR TO BE PROVIDE WITH 3.50mm MATING LENGTH AT POSITION 7 OF MODULE G4, 5.00mm MATING LENGHT AT ALL OTHER POSITIONS.

3) DETAILED PRODUCT, ELECTRICAL, AND MECHANICAL INFORMATION IS AVAILABLE IN THE LATEST STANDARD SCORPION PRODUCT PUBLICATION. VISIT CONNECTPOSITRONIC.COM/PRODUCTS/146/SCORPION OR CONNECTPOSITRONIC.COM.

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 PROVIDE WITH 3.50mm MATING LENGTH AT POSITION 7 OF MODULE G4, 5.00mm MATING LENGHT AT ALL OTHER POSITIONS.
3) DETAILED PRODUCT, ELECTRICAL, AND MECHANICAL INFORMATION IS AVAILABLE IN THE LATEST SCORPION PRODUCT PUBLICATION. VISIT CONNECTPOSITRONIC.COM/PRODUCTS/146/SCORPION OR CONNECTPOSITRONIC.COM.

Drawing No.: ASK22139-1
Ordering Part Number: SP7KH93M000A1-PA778
Remarks: -

Drawing No.: ASK22139-2
Ordering Part Number: SP7KH93M000A1/AA-PA778

Physics xTCA Zone 3 Power
Male press fit backplane power connector

Physical xTCA Zone 3 Power
Male press fit backplane power connector

For more information, please visit website at www.connectpositronic.com