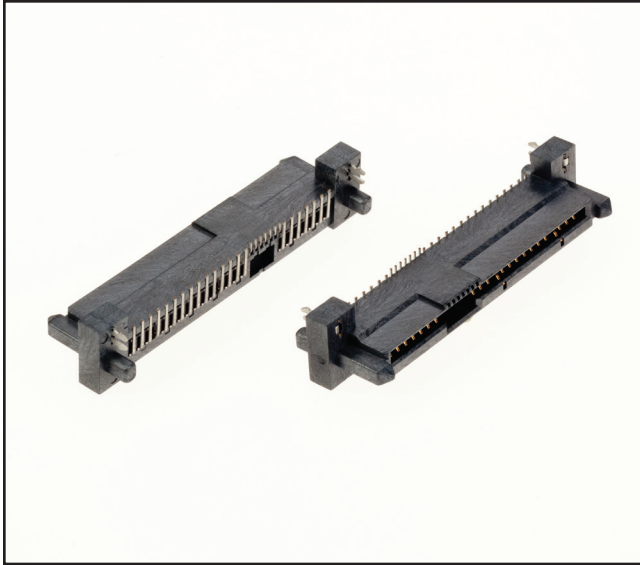


3M™ Serial Attached SCSI (SAS) Connector

Boardmount Compliant Pin and Surface Mount, Vertical Receptacle

SBR Series



- 6 Gbps input/output connector for backplane applications
- Two contact mating levels for early-mate and late-break allows “blind mating” or “hot swap” applications
- Capable of accepting HDD fitted with SAS or Serial Advanced Technology Attachment (SATA) Header
- Compliant pin
- Compatible with drives compliant to SFF-8223, SFF-8323, and SFF-8523
- Compliant to SFF-8482 Rev 2.2
- Meets SAS Specification, SAS-2.0
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3Mconnector.com for compliance information (RIA E1 & C1 apply)

Date Modified: April 22, 2010

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Sheet 1 of 5

Physical

Insulation:

Material: High Temperature Thermoplastic
Flammability: UL94V-0
Color: Black

Contact:

Material: Copper Alloy

Plating:

Underplating: 50 μ" [1.27 μm] Min. Nickel
Wiping Area: 30 μ" [0.76 μm] Min. Gold
Solder Tails: 100 μ" [2.54 μm] Min. Matte Tin or Gold Flash

Marking: 3M Logo

Electrical

Current Rating: Power Pin: 1.5 A
Signal Pin: 500 mA

Insulation Resistance: 10³ MΩ min.

Withstanding Voltage: 500 V_{AC} at sea level

Environmental

Temperature Range: -40°C to +85°C

UL File No.: E68080

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Interconnect Solutions
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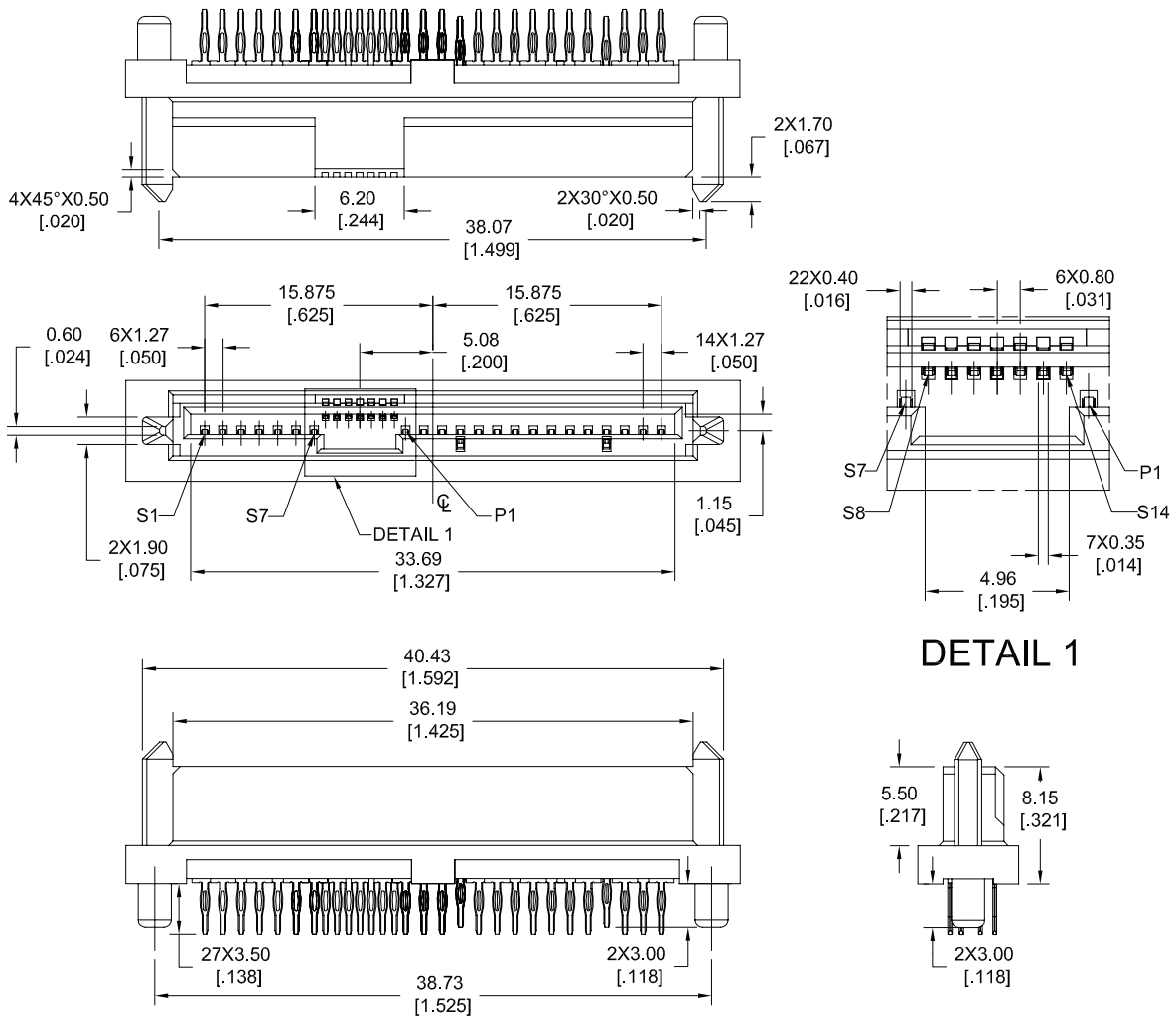
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3M™ Serial Attached SCSI (SAS) Connector

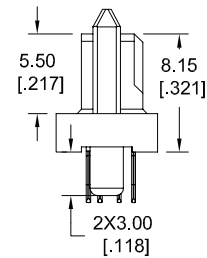
Boardmount Compliant Pin and Surface Mount, Vertical Receptacle

SBR Series

Compliant Pin



DETAIL 1



| mm [inch] | | | |
|------------------------|-------|-------|-------|
| Tolerance Unless Noted | | | |
| | .0 | .00 | .000 |
| mm | ±.38 | ±.25 | ±.13 |
| inch | ±.015 | ±.010 | ±.005 |

[] Dimensions for Reference only

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Sheet 2 of 5

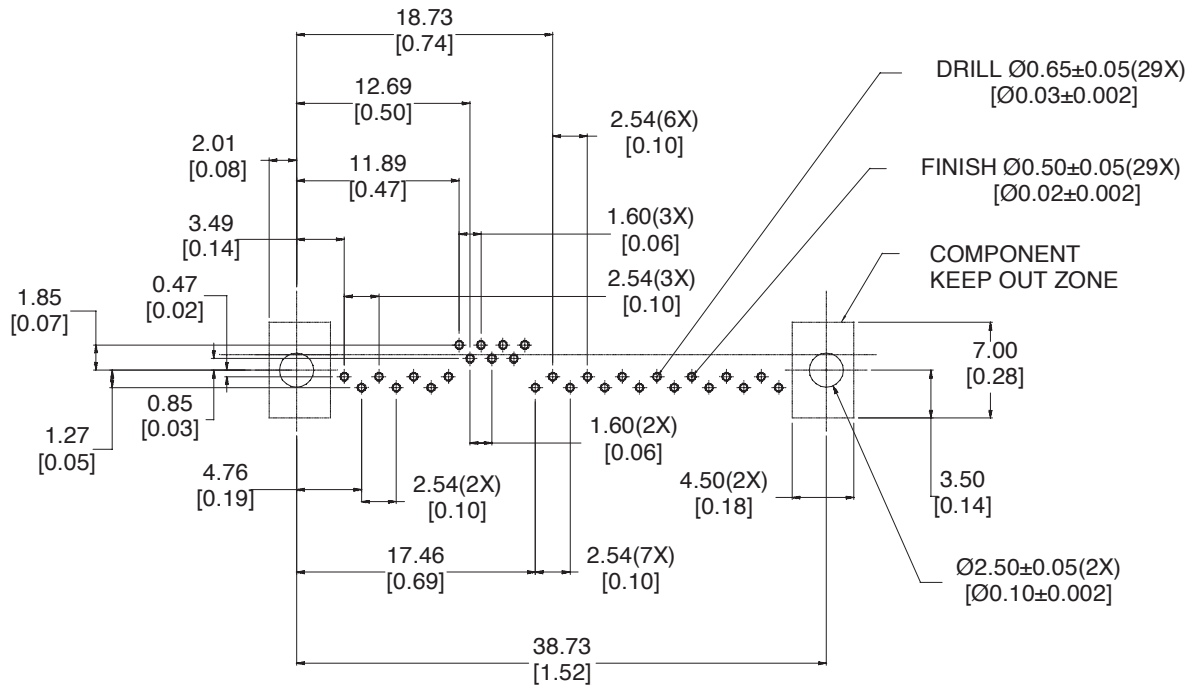
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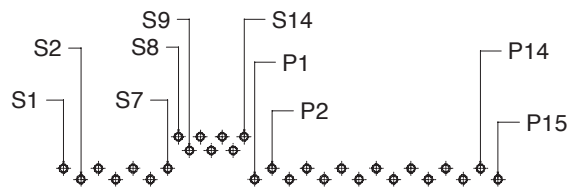
3M™ Serial Attached SCSI (SAS) Connector

Boardmount Compliant Pin and Surface Mount, Vertical Receptacle

SBR Series



RECOMMENDED PCB LAYOUT



CONNECTOR PIN PATTERN LAYOUT
FROM TOP SIDE OF PCB

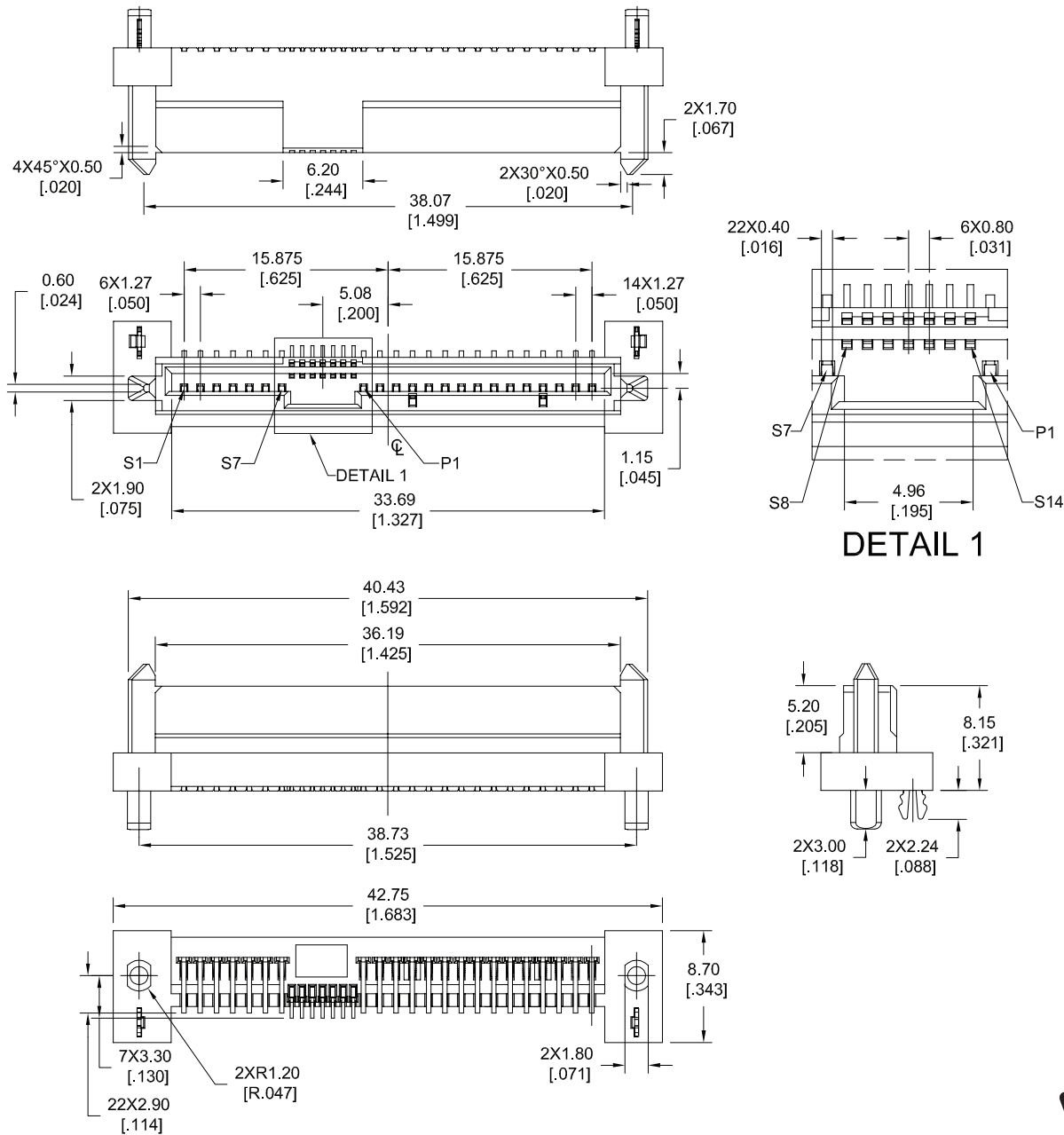
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3M™ Serial Attached SCSI (SAS) Connector

Boardmount Compliant Pin and Surface Mount, Vertical Receptacle

SBR Series

Vertical Surface Mount



| CONNECTOR PIN ASSIGNMENT | | | |
|--------------------------|--------------|-------------|--------------|
| S1 - GROUND | S8 - GROUND | P1 - 3.3 V | P8 - 5 V |
| S2 - A+ | S9 - A+ | P2 - 3.3 V | P9 - 5 V |
| S3 - A- | S10 - A- | P3 - 3.3 V | P10 - GROUND |
| S4 - GROUND | S11 - GROUND | P4 - GROUND | P11 - GROUND |
| S5 - B- | S12 - B- | P5 - GROUND | P12 - GROUND |
| S6 - B+ | S13 - B+ | P6 - GROUND | P13 - 12 V |
| S7 - GROUND | S14 - GROUND | P7 - 5 V | P14 - 12 V |
| | | P15 - 12V | |

| mm [inch] | | | |
|------------------------|-------|-------|-------|
| Tolerance Unless Noted | | | |
| | .0 | .00 | .000 |
| mm | ±.38 | ±.25 | ±.13 |
| inch | ±.015 | ±.010 | ±.005 |

[] Dimensions for Reference only

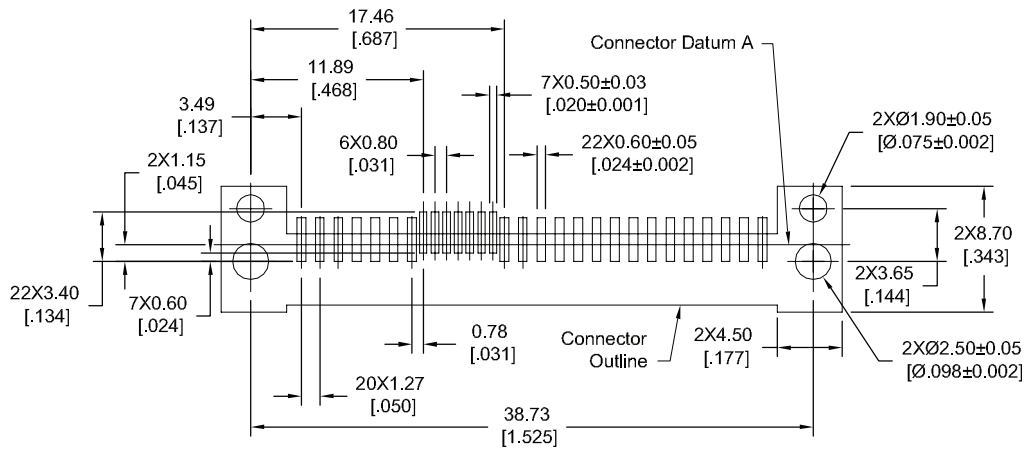


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Sheet 4 of 5

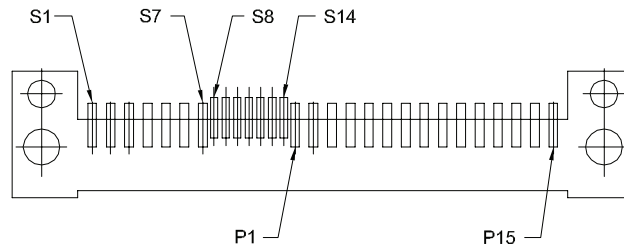
3M™ Serial Attached SCSI (SAS) Connector

Boardmount Compliant Pin and Surface Mount, Vertical Receptacle

SBR Series



RECOMMENDED PCB THICKNESS 1.65 [0.066] NORMAL
HOLE & PAD PATTERN TOL ±0.05 [0.002]



CONNECTOR PIN PATTERN LAYOUT
FROM TOP SIDE OF PCB

Ordering Information

SBR - ST - 29 - X - XX (RIA E1 & C1 apply)

Termination Style:
M = Surface Mount
P = Press Fit

Plating:
FT
ML

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Sheet 5 of 5

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