

# 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](http://www.3Mconnector.com) for compliance information (RIA E1 & C1 apply)

Date Modified: April 22, 2010

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## 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

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## Electrical

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

**Insulation Resistance:** 10<sup>3</sup> MΩ min.

**Withstanding Voltage:** 500 V<sub>AC</sub> at sea level

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## Environmental

**Temperature Range:** -40°C to +85°C

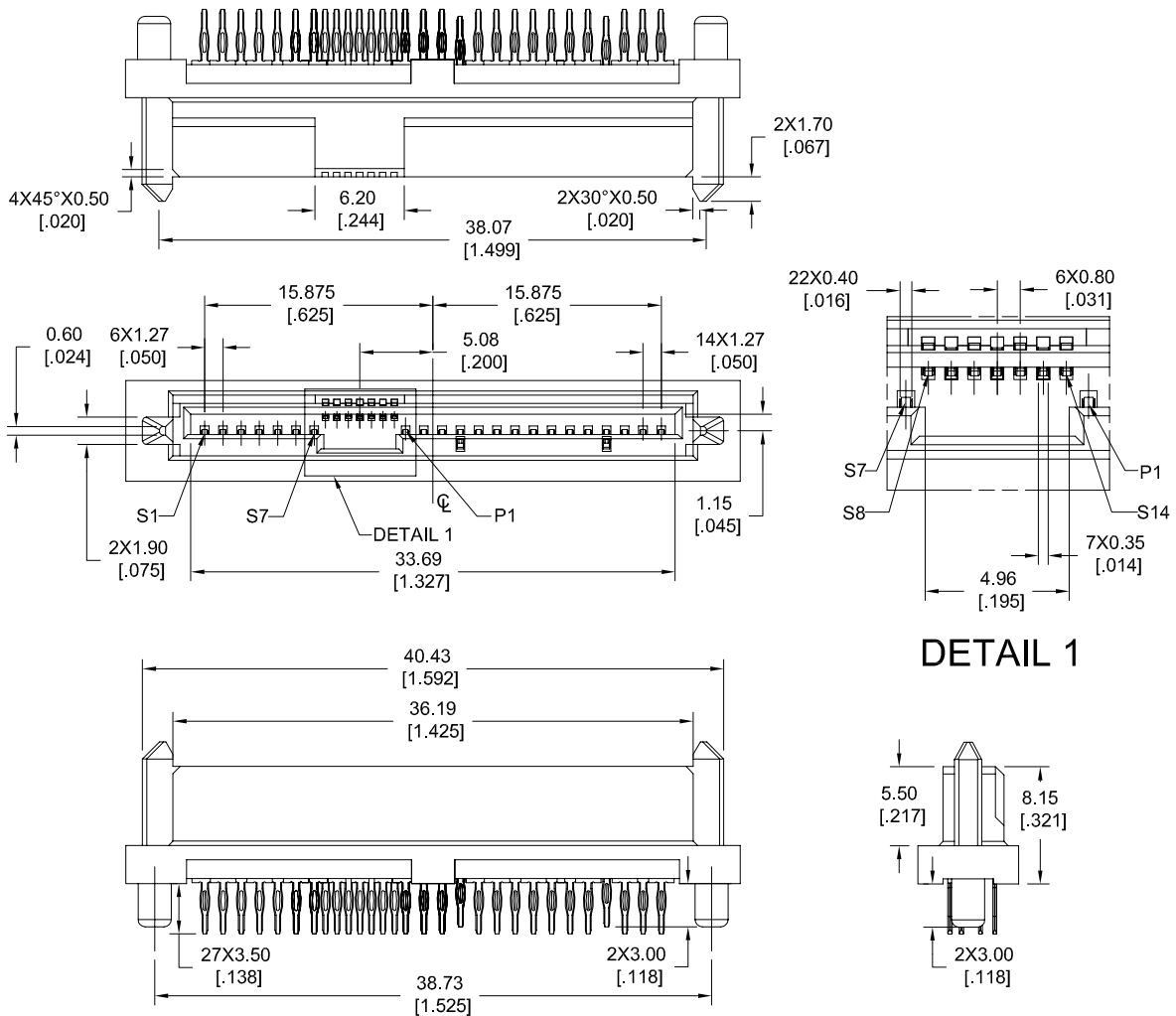
UL File No.: E68080

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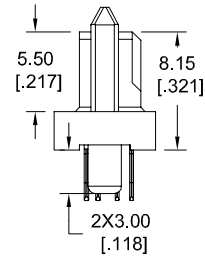
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Compliant Pin



DETAIL 1



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

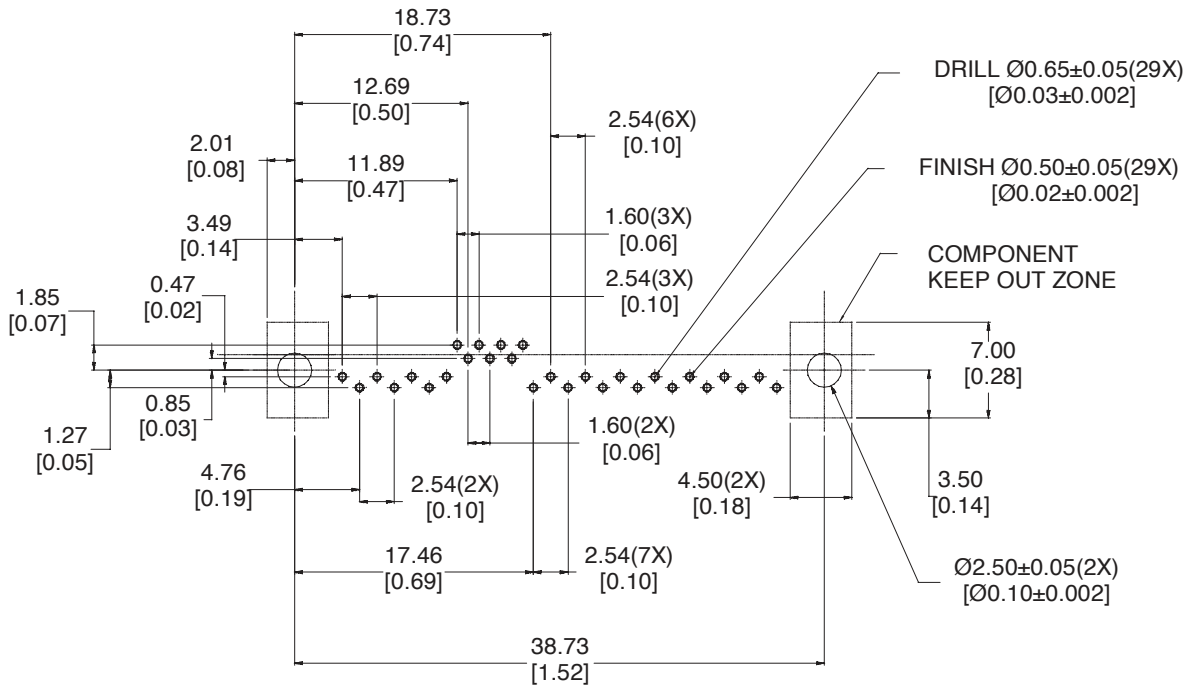
[ ] Dimensions for Reference only

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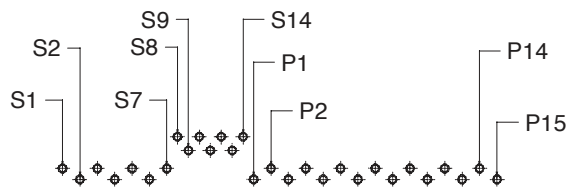
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RECOMMENDED PCB LAYOUT



CONNECTOR PIN PATTERN LAYOUT  
FROM TOP SIDE OF PCB

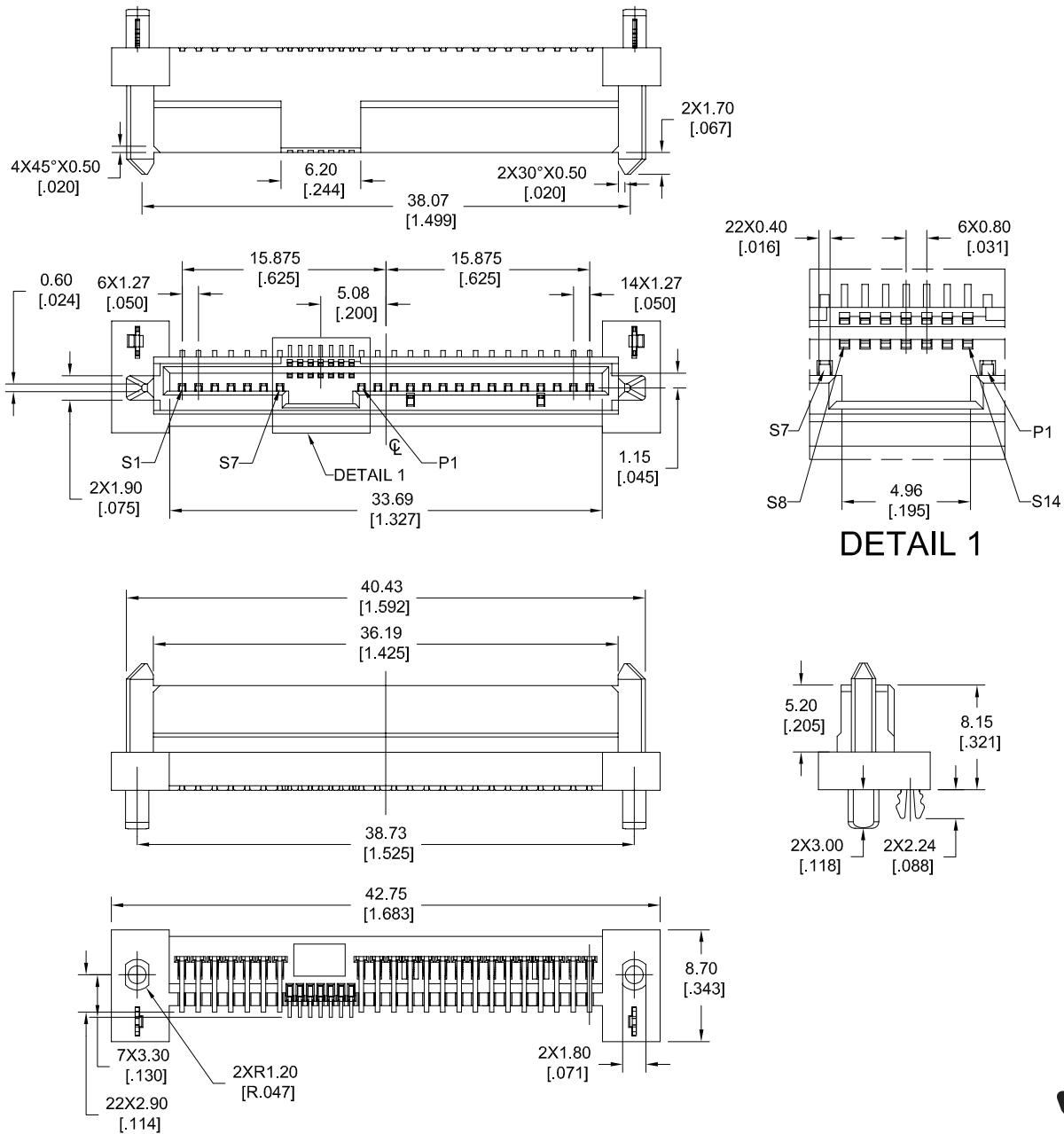
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## Vertical Surface Mount



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 - 12 V

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

[ ] Dimensions for Reference only

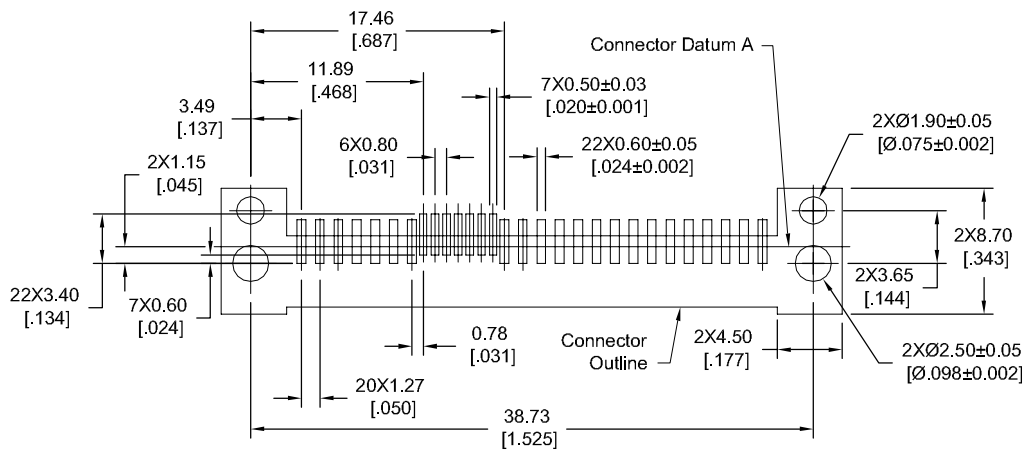


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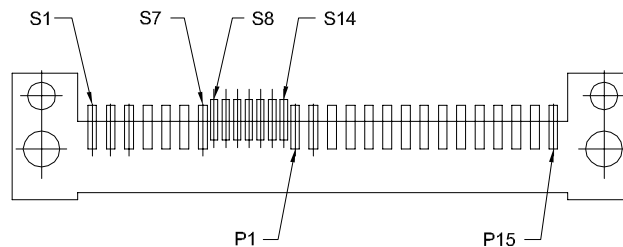
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RECOMMENDED PCB THICKNESS 1.65 [0.066] NORMAL HOLE & PAD PATTERN TOL ±0.05 [0.002]



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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