UltraPort OSFP 1xN cages Product Specification S6083C Rev 1.0

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Related Products

QSFP+



QSFP+ 38 POSITION CONNECTOR





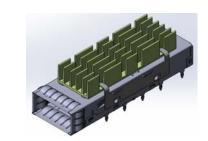
SINGLE 1° CAGE

MiniSAS



FS1 SINGLE PORT CAGE WITH METAL GASKET

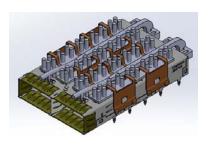
Revision Date: January 20, 2015



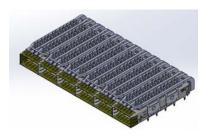
1x1 Cage with Fin heat sink



1x4 Cage with pin fin heat sinks and single barrel light pipes



1x2 Cage with round pin heat sinks and single barrel light pipes



1x6 Cage with square pin heat sinks and quad barrel light pipes

Overview

This short form Product Specification defines the general use and performance parameters for Amphenol's UltraPort QSFP 1xN cage series. It is designed to comply with the Quad Small Form-factor Pluggable (QSFP) SFF-8663 QSFP+ 28Gbps cage specification.

Availability: 1x1, 1x2, 1x3, 1x4 and 1x6 versions are available in thru the bezel configurations. 1x1 One degree cage also available in thru the bezel configuration. Behind bezel and Hybrid versions shall become available soon.

Usage

The UltraPort QSFP single row cages are intended to be used with UltraPort QSFP SMT connector . (Refer to Product spec. S6082C)

Applications

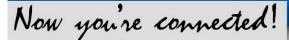
Intended for use in high speed serial interconnect applications such as:

- Cellular hubs
- Switches
- Servers
- Storage devices

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Related Products

QSFP+



QSFP+ 38 POSITION CONNECTOR

PCI Express



MiniSAS



26 POSITION CONNECTOR WITH HOLD DOWN TABS



General Requirements

Cages are packaged in trays.

Heat sinks/clips and light pipes are assembled to the cage and placed in the tray if available. Heat sinks and heat sink clips may be packaged separately for 1x1 options only. Dust covers are packaged separately if ordered. "Belly-to-belly" version allows two cages to mount on opposite sides of the PCB.

Cage Mechanical Characteristics

Cages are available with and without Heat Sinks Cages are available with and without Light Pipes Cages are press-fit into PCBs Cages have error proof features according to QSFP MSA

Material Requirements

Unless otherwise specified, the materials for each component shall be:

Cage

- Base material Phosphor Bronze
- 100 μ" (2.54 μm)Minimum Nickel plated

Heat Sink

- Base material –Aluminum alloy with Nickel plating
- Heat Sink Clip
 - Base material Stainless Steel

Light Pipe

Base material – Clear Polycabonate, optical grade

Dust Cover

Base material – Conductive Rubber

EMI gasket

Base material – Conductive elastomer

EMI flange

Base material – Dia cast zinc alloy with Nickel plating

Operating temperature: -40° to $+85^{\circ}$ C Storage temperature: -40° to $+85^{\circ}$ C

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OSFP+ 38 POSITION CONNECTOR





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FS1 SINGLE PORT CAGE WITH METAL GASKET

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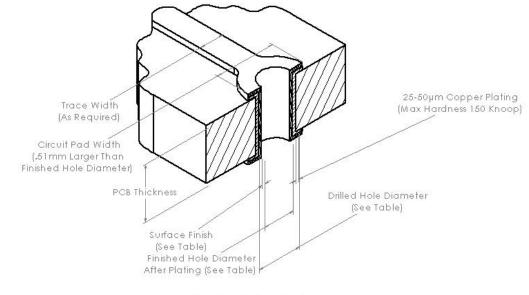
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Assembly Instructions

Compliant Pin Holes must be drilled and plated through to specific dimensions to prevent damage during placement of cage assembly on the PCB. See table below.



Drawing Not to Scale

| Surface Finish | Drilled Hole Diameter | Finished Hole Diameter | Surface Finish Thickness |
|-----------------|-----------------------|---------------------------|---|
| HASL SnPb | 1.15±0.02 | 1.05 Ref | 0.004-0.010 |
| Immersion Sn | 1.15±0.02 | 1.05 Ref | 0.0005 Min. |
| OSP | 1.15±0.02 | 1.05 Ref | 0.0002-0.0005 |
| Immersion Au/Ni | 1.15±0.02 | 1.05 Ref | 0.004-0.0076 (Ni) 0.0001-0.0005 (Au) |

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Available Documents

Drawing Numbers:

| P-FS1-Z38-X0Z6-10 | UltraPort QSFP | SMT connector, with resonance dampening feature |
|--|----------------|--|
| P-U95-T(A,L)1X1-1XXX P-U95-T(L)2X1-1XXX P-U95-T(L)3X1-1XXX | UltraPort QSFP | 1x1 thru the bezel cage, 0 deg. with heat sink and light pipe options 1x2 thru the bezel cage, 0 deg. with heat sink and light pipe options 1x3 thru the bezel cage, 0 deg. with heat sink and light pipe options |
| P-U95-T(L)4X1-1XXX P-U95-T(L)6X1-1XXX | UltraPort QSFP | 1x4 thru the bezel cage, 0 deg. with heat sink and light pipe options 1x6 thru the bezel cage, 0 deg. with heat sink and light pipe options |
| P-U95-W1X1-1XXX | | 1x1 thru the bezel cage, 1 deg. with heat sink and ngitt pipe options 1x1 thru the bezel cage, 1 deg. with heat sink options |
| P-U95-G(P)1X1-1XXX P-U95-G(P)2X1-1XXX P-U95-G(P)3X1-1XXX | UltraPort QSFP | 1x1 behind bezel, 0 deg., heat sink and light pipe options-Preliminary 1x2 behind bezel, 0 deg., heat sink and light pipe options-Preliminary 1x3 behind bezel, 0 deg., heat sink and light pipe options-Preliminary |
| P-U95-D(V)1X1-1XXX | UltraPort QSFP | 1x1 hybrid cage, 0 deg., heat sink and light pipe options-Preliminary |
| P-U95-D(V)2X1-1XXX P-U95-D(V)3X1-1XXX P-U95-D(V)4X1-1XXX | UltraPort QSFP | 1x2 hybrid cage, 0 deg., heat sink and light pipe options-Preliminary 1x3 hybrid cage, 0 deg., heat sink and light pipe options-Preliminary 1x4 hybrid cage, 0 deg., heat sink and light pipe options-Preliminary |

Contact factory or Authorized Amphenol representative for alternate configurations

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