# New Project Request: QSFP for 112G Operation as Proposed by QSFP-DD MSA

- Two parts:
  - Document 1: Define QSFP modules, connectors and cages to support 112G applications. The technical information will be based on work done and sent to SFF by the QSFP-DD MSA.
  - Document 2: QSFP112 Electrical Specification and Management Interface Timing.

• The method of incorporating the above information and the naming of the

documents will be left up to SFF.

#### SFF-TA-1027

QSFP2.0 Connector/ Cage/ Module Specification

Points to SFF-TA-1028

Does not include any references to data rate

#### SFF-TA-1028

QSFP 112G Electrical Specification

Points to SFF-TA-1027 & CMIS (OIF)

Includes information necessary to run QSFP at 112 G



# New Project Request: QSFP for 112G Operation as Proposed by QSFP-DD MSA

### SFF Supporters:

- 1. Amphenol
- 2. Molex
- 3. TE
- 4. FIT
- 5. II-VI
- 6. Samtec
- 7. AOI
- 8. CZT
- 9. Eoptolink
- 10. NVIDIA
- 11. Juniper
- 12. Lotes Ltd.

### Other Supporters:

- 1. Spirent
- 2. Senko
- 3. Celestica
- 4. Maxlinear



# New Project Proposal: QSFP for 112G Operation as Proposed by QSFP-DD MSA

- Liaison with QSFP-DD MSA as documents are released.
- IP Declarations:
  - See QSFP-DD MSA website <a href="http://www.qsfp-dd.com/ipr-statements/">http://www.qsfp-dd.com/ipr-statements/</a>
  - NOTE: The document will undergo an IP disclosure period prior to publication per the SNIA SFF Process Guide



# Part 1:

QSFP2.0 Connector/ Cage/ Module Specification



# New Project Proposal SFF-TA-1027: QSFP2.0 Connector/ Cage/ Module Specification

- Define QSFP modules, connectors and cages to support 112G applications and beyond. The technical information will be based on work done and sent to SFF by the QSFP-DD MSA.
  - The intention is to have a speed independent mechanical document (physical definitions) that has the opportunity to be utilized for future generations.
  - Additional documents referencing speed will point to the definition within the mechanical specification.
  - Type 1 module, Connectors and cages for 1x1 and 2x1 variations as defined in QSFP-DD/QSFP-DD800/QSFP112 Hardware Specification Revision 6.01
  - The QSFP-DD MSA suggests adding definitions for Type 2, 2A, and 2B modules where the QSFP-DD module is the reference.
- Editors: Amphenol (Michael Scholeno/ Paul Coddington), Molex (Alex Haser)



# New Project Proposal SFF-TA-1027: QSFP2.0 Connector/ Cage/ Module Specification

- The proposal is to create a single document that includes the physical characteristics of QSFP112 modules, connectors and cages:
  - QSFP-DD MSA Rev 6.01 Chapter 9 definitions to be included.
  - Module definitions
    - Updated paddle card definitions including pad width and length
    - Type 1, 2, 2A and 2B Modules (thermally enhanced)
    - Surface Roughness and Flatness definitions, label locations
  - Connector and Cage definitions (multiple versions)
    - 1x1 SMT including normative footprints
    - 2x1 SMT including normative footprints
  - Performance Requirements (EIA-364-1000)



# Part 2:

**QSFP112 Electrical Specification** 



## New Project Proposal SFF-TA-1028: QSFP112 Electrical Specification

- Document 2: QSFP112 Electrical Specification and Management Interface Timing.
  - The technical information will be based on work done and sent to SFF by the QSFP-DD MSA.
- Editor: II-VI (Vera Koleva) Looking for Co-Editor



# New Project Proposal SFF-TA-1028: QSFP112 Electrical Specification

- The second part of the proposal is a document that identifies describes the details that identifies QSFP112 and points to the above mechanical document for the desired geometry. (Work done by transceivers Group)
  - QSFP-DD MSA Rev 6.01 Chapter 5
    - Pad Function Definitions
    - Management Interface
    - Power Classes

