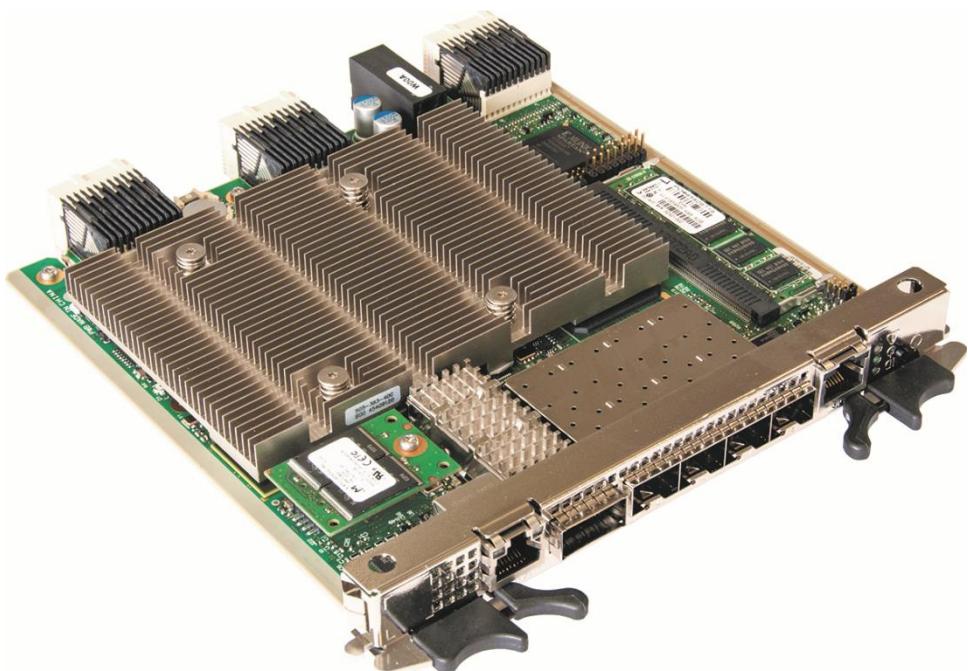


» Kontron Compatibility Guide «



MSH8910

Document Revision 1.0

Revision History

Revision	Brief description of changes	Date of issue
1.0	First release	August 2015

Customer Service

Contact Information:

Kontron America, Inc.
 14118 Stowe Dr
 Poway, CA 92064-7147
 USA
 Tel.: +1 888 294 4558
 Fax: +1 858 677 0898
 E-mail: support@us.kontron.com

Kontron Europe GmbH
 Lise-Meitner-Str. 3-5
 86156 Augsburg
 Germany
 Tel.: +800-KONTRONAG
 Fax: +49 821 4086 888
 E-mail: support@kontron.com

Visit our site at: www.kontron.com

Copyright © 2015 Kontron America Inc.

All rights reserved. No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), without the express written permission from Kontron.

Customer Comments

If you have any difficulties using this guide, discover an error, or just want to provide some feedback, please send a message to Kontron. Detail any errors you find. We will correct the errors or problems as soon as possible and post the revised user's guide on our website. Thank you.

Table of Contents

1	Product Compatibility Guide.....	4
2	Peripherals	4
2.1	QSFP+ Modules	4
2.1.1	The base recommendations.....	4
2.1.2	Active optical transceivers.....	4
2.1.3	Passive copper cable assemblies	4
2.1.4	Kontron tested peripherals.....	4
2.2	SFP+ Modules	5
2.2.1	The base recommendations.....	5
2.2.2	Active optical transceivers.....	5
2.2.4	Kontron tested peripherals.....	5
2.3	SFP Modules	5
2.3.1	The base recommendations.....	5
2.3.2	Active optical transceivers.....	5
2.3.3	CopperSFP Modules	5
2.3.5	Kontron tested peripherals.....	5
3	Field serviceable components	6
3.1	Battery.....	6

List of Tables

Table 1: Tested QSFP+ interconnections.....	4
Table 2: Tested SFP+ interconnections.....	5
Table 3: Tested SFP interconnections	5
Table 4: Suggested battery part numbers	6

1 Product Compatibility Guide

This document is intended to provide users of the SYMKLOUD MS2910 platform's MSH8910 hub with guidelines for choosing peripherals or replaceable components as well as a list of models tested by Kontron.

2 Peripherals

2.1 QSFP+ Modules

The QSFP+ cage offers compatibility based on broad industry support.

2.1.1 The base recommendations

- ✓ Power class 1 (i.e. maximum 1.5W). Devices up to power class 4 are supported but MS2910 platform operating temperature will be limited.
- ✓ Industrial temperature range (module must support up to +85°C) is necessary for full MS2910 operating temperature support.
- ✓ XLPPI electrical interface or "limiting" modules only. "Linear" modules, for example 40GBASE-LRM modules, are not compatible.

2.1.2 Active optical transceivers

- ✓ Generally, 40GBASE-SR4 and 40GBASE-LR4 type modules are compatible.
- ✓ Split 40GBASE to 4x 10GBASE versions are also compatible. Please consult the MSH8910 documentation for more information about "port expansion".

2.1.3 Passive copper cable assemblies

- ✓ Generally, 40GBASE-CR4 compliant type cable assemblies will be compatible.
- ✓ Split 40GBASE to 4x 10GBASE versions are also compatible. Please consult the MSH8910 documentation for more information about "port expansion".

2.1.4 Kontron tested peripherals

Table 1: Tested QSFP+ interconnections

Type	Manufacturer	Part Number
40GBASE-SR4	Avago	AFBR-79EQDZ
40GBASE-SR4	Finisar	FTL410QD2C
40GBASE-CR4	FCI	10093084-2010LF

2.2 SFP+ Modules

2.2.1 The base recommendations

- ✓ Power Level 1 (i.e. maximum 1.0W).
- ✓ Industrial temperature range (module must support up to +85°C) is necessary for full MSH8910 operating temperature support.
- ✓ SFF 8431 electrical interface or “limiting” modules only. “Linear” modules, for example 10GBASE-LRM modules, are not compatible.

2.2.2 Active optical transceivers

- ✓ Generally, 10GBASE-SR and 10GBASE-LR type modules are compatible.

2.2.3 Passive copper cable assemblies

- ✓ Generally, 10GBASE-CR compliant type cable assemblies will be compatible.

2.2.4 Kontron tested peripherals

Table 2: Tested SFP+ interconnections

Type	Manufacturer	Part Number
10GBASE-SR	Avago	AFBR-709DMZ
10GBASE-SR	Finisar	FTLX8571D3BCL
10GBASE-CR	TE Connectivity	2032237-4

2.3 SFP Modules

2.3.1 The base recommendations

- ✓ Power Level 1 (i.e. maximum 1.0W).
- ✓ Industrial temperature range (module must support up to +85°C) is necessary for full MSH8910 operating temperature support.

2.3.2 Active optical transceivers

- ✓ Generally, 1000BASE-SX and 1000BASE-LX type modules are compatible.

2.3.3 1000BASE-T “Copper SFP” Modules

- ✓ Generally CopperSFP modules are supported in 1000BASE-X to 1000BASE-T media converter mode
- ✓ Support for the different line speeds 10/100 and 1000 has been tested with dedicated Finisar modules only. Please consult the MSH8910 documentation for more information about “sgmii mode”.

2.3.4 Passive copper cable assemblies

- ✓ Generally, 1000BASE-CX compliant type cable assemblies are compatible.

2.3.5 Kontron tested peripherals

Table 3: Tested SFP interconnections

Type	Manufacturer	Part Number
1000BASE-T	Finisar	FCLF-8520-3
1000BASE-T	Finisar	FCLF-8521-3
1000BASE-T	Finisar	FCLF-8522-3

3 Field serviceable components

3.1 Battery

The Shelf Management Controller of the MSH8910 has a battery backed time keeping function. If the battery is low, an event will be generated. Please refer to the MSH8910 documentation for further information about the System Event Log. The battery is socketed and thus can be replaced. Base recommendations for choosing a replacement:

- ✓ Lithium coin cell BR1225
- ✓ 3 Volt nominal
- ✓ 12.5mm diameter, 2.5mm depth
- ✓ 0°C to 70°C or better

Suggested manufacturer part numbers:

Table 4: Suggested battery part numbers

Manufacturer	Part Number
Panasonic	BR1225
Rayovac	BR1225

CORPORATE OFFICES

Europe, Middle East & Africa

Lise-Meitner-Str. 3-5

86156 Augsburg

Germany

Tel.: + 49 821 40 860

Fax: + 49 821 40 860 111

sales@kontron.com

North America

14118 Stowe Drive

Poway, CA 92064-7147

USA

Tel.: + 1 888 294 4558

Fax: + 1 858 677 0898

info@us.kontron.com

Asia Pacific

1~2F, 10 Building, No. 8

Liangshuihe 2nd Street

Beijing 100176, P. R. China

Tel.: + 86 10 63751188

Fax.: + 86 10 83682438

info@kontron.cn