

GigaSTAR[®]

Application Note

GigaSTaR⁰ and Shielded Twisted Pair (STP) Cables

Revision 1.1

Nov 2003

This document provides support for user selection of Shielded Twisted Pair (STP) cables in relation to GigaSTaR® applications. The tables below list recommended samples of cables that may be used in GigaSTaR® applications. Please note that this is not a complete list and does not contain all cable manufacturers providing cables suited for GigaSTaR® applications.

The distances noted herein were achieved in the Inova Semiconductors lab using standard production ING_TRC boards. Results may differ in applications utilizing different board layouts, power supplies and/or electrical environments. Therefore these results are provided as general information for cable selection, similar product performance may vary.

Installation Cables:

Manufacturer	Cable Type	Maximum Distance	Diameter in mm	STP Pairs	Cost <1\$/m	Remarks
W.L.GORE	GGSC1608-x EOP	100 m	7,5	2	No	Longest distance achievable with copper STP cables
Kerpen	Megaline 524SC	40 m	6,0	4	Yes	CAT5 cable
Kerpen	Megaline 722 2P/4P	45 m	4,5 x 7,5/8,2 (4P)	2 / 4	Yes	CAT7 cable / STPs individually shielded
Kerpen	Megaline 8	50 m	8,5	4	Yes	STPs individually shielded
Belden	9688 (IBM Type A)	50 m	11 x 7,5	2	Yes	UL-certified, STPs individually shielded

Patch Cables:

Manufacturer	Cable Type	Maximum Distance	Diameter in mm	STP Pairs	Cost <1\$/m	Remarks
Kerpen	Megaline 526 flex	30 m	5,7	4	Yes	CAT5 cable
Kerpen	Megaline 726 flex 1/2/4P	30 m	3/5/6,2	1 / 2 / 4	Yes	CAT7 / STPs individually shielded
Belden	1215a	40 m	8,2	2	Yes	UL-certified, STPs individually shielded

Application Specific Flex Cables

Manufacturer	Cable Type	Maximum Distance	Diameter in mm	STP Pairs	Cost <1\$/m	Remarks
W.L.GORE	GSC 02-2152400	35 m	7,9	2	No	In Line with to European railway standards
W.L.GORE	GSC 01-22881-02	40 m	8,4	2	No	Temp range -40°C to +100°C
Ernst&Engbring	EE661.0020	35 m	9,6	2+4	No	Remote Terminal Cable
Ernst&Engbring	EE661.0027	35 m	10,0	2+4	No	Remote Terminal Cable
Ernst&Engbring	EE663.017.08	50 m	7,5	2+2	No	MVB cable – in-line with European railway standards
Ernst&Engbring	EE16735-1	40 m	6,0	2	No	MVB cable – in line with European railway standards
Ernst&Engbring	EE16501-2G	50 m	7,5	2	No	MVB cable – in line with European railway standards
Ernst&Engbring	EE17491-3	30 m	5,5	2+2	No	Low profile cable for multimedia equipm.
Ernst&Engbring	EE16443-2	15 m	3,4	1	No	Low profile flex cable for automotive syst.

Inova Semiconductors GmbH

Grafinger Str. 26

D-81671 Munich, Germany

Phone: +49 (0)89 / 45 74 75 - 60

Fax: +49 (0)89 / 45 74 75 - 88

E-mail: info@inova-semiconductors.de

URL: <http://www.inova-semiconductors.com>



inova[®] Semiconductors is a registered trademark of Inova Holding GmbH.



GigaSTAR[®] is a registered trademark of Inova Semiconductors GmbH.

All other trademarks or registered trademarks are the property of their respective holders.

Inova Semiconductors GmbH does not assume any liability arising from the application or use of the product described herein; nor does it convey any license under its patents, copyright or any rights of others.

Inova Semiconductors products are not designed, intended or authorized for use as components in systems to support or sustain life, or for any other application in which the failure of the product could create a situation where personal injury or death may occur.

The information contained in this document is believed to be current and accurate as of the publication date. Inova Semiconductors GmbH reserves the right to make changes at any time in order to improve reliability, function or performance to supply the best product possible.

Inova Semiconductors GmbH assumes no obligation to correct any errors contained herein or to advise any user of this text of any correction if such be made.

© Inova Semiconductors GmbH 2003. All rights reserved.