

iC-NQ EVAL NQ5D

EVALUATION BOARD DESCRIPTION



Rev A1, Page 1/3

ORDERING INFORMATION

Type	Order Designation	Description
iC-NQ, iC-MA	EVAL NQ5D	Evaluation Board ready-to-operate, equipped with iC-NQ and iC-MA angle sensor
iC-NQ GUI Software		Evaluation Board Software PC program to configure iC-NQ and the configuration EEPROM; available for download from www.ichaus.com
BiSS to PC-LPT Adapter	iCSY MB3A	PC Adapter with BiSS Master iC-MB3 for PC parallel printer port (supplied without cable)
BiSS to PC-USB Adapter	iCSY MB3U	PC Adapter with BiSS Master iC-MB3 for PC USB port, supplied with cable and plug-in power supply
BiSS GUI Software		BiSS Master Software universal PC program to configure master and slave boards; available for download from www.ichaus.com

BOARD NQ5D

(size 100 mm x 80 mm)

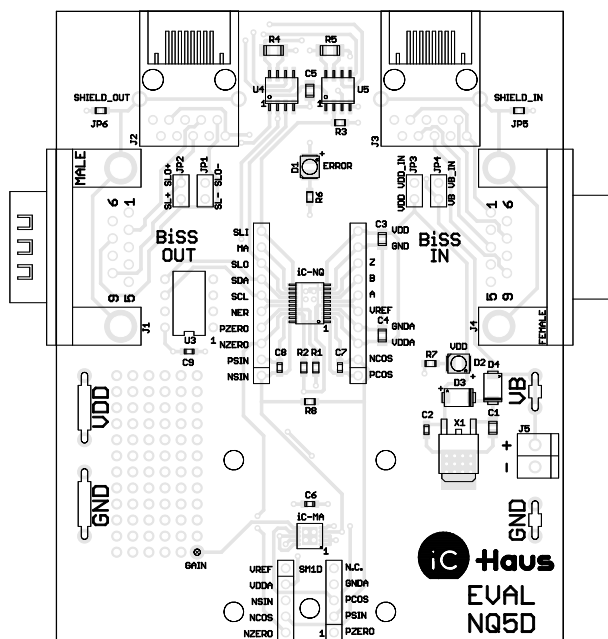


Fig. 1: Evaluation board NQ5D, component side

TERMINAL DESCRIPTION

Name	Function
VB	+8...15 V Supply Volt.* (ca. 105 mA)
GND	Supply Ground
VDD	+5 V Supply Volt.* (ca. 110 mA)
GND	Supply Ground

*) See jumper options first.

BiSS IN Plug Configuration (J4, 9-pole, female)

No.	Name	Function
1	VB_IN	Pos. Supply Voltage (+VB)
2	MA +	BiSS Clock Line Input
3	MA -	BiSS Clock Line Input
4	VDD_IN	Pos. Supply Voltage (+5 V)
5	SLI -	Slave Data Input
6	GND	Ground (0 V)
7	SL +	BiSS Data Line
8	SL -	BiSS Data Line
9	SLI +	Slave Data Input

BiSS OUT Plug Configuration (J1, 9-pole, male)

No.	Name	Function
1	VB	Pos. Supply Voltage (+VB)
2	MAO +	BiSS Clock Line Output
3	MAO -	BiSS Clock Line Output
4	VDD	Pos. Supply Voltage (+5 V)
5	SLO -	Slave Data Output
6	GND	Ground (0 V)
7	SL +	BiSS Data Line
8	SL -	BiSS Data Line
9	SLO +	Slave Data Output

iC-NQ EVAL NQ5D

EVALUATION BOARD DESCRIPTION

DESCRIPTION

The NQ5D evaluation board is equipped with the iC-MA Angular Hall Sensor supplying its sine, cosine and reference output signals to the sine-to-digital converter iC-NQ. The board features two sub-D 9 pole BiSS plugs to support the cascading of multiple boards. iC-NQ's GUI software can be used to access the board from a Windows PC what needs the MB3U or MB3A adapter.

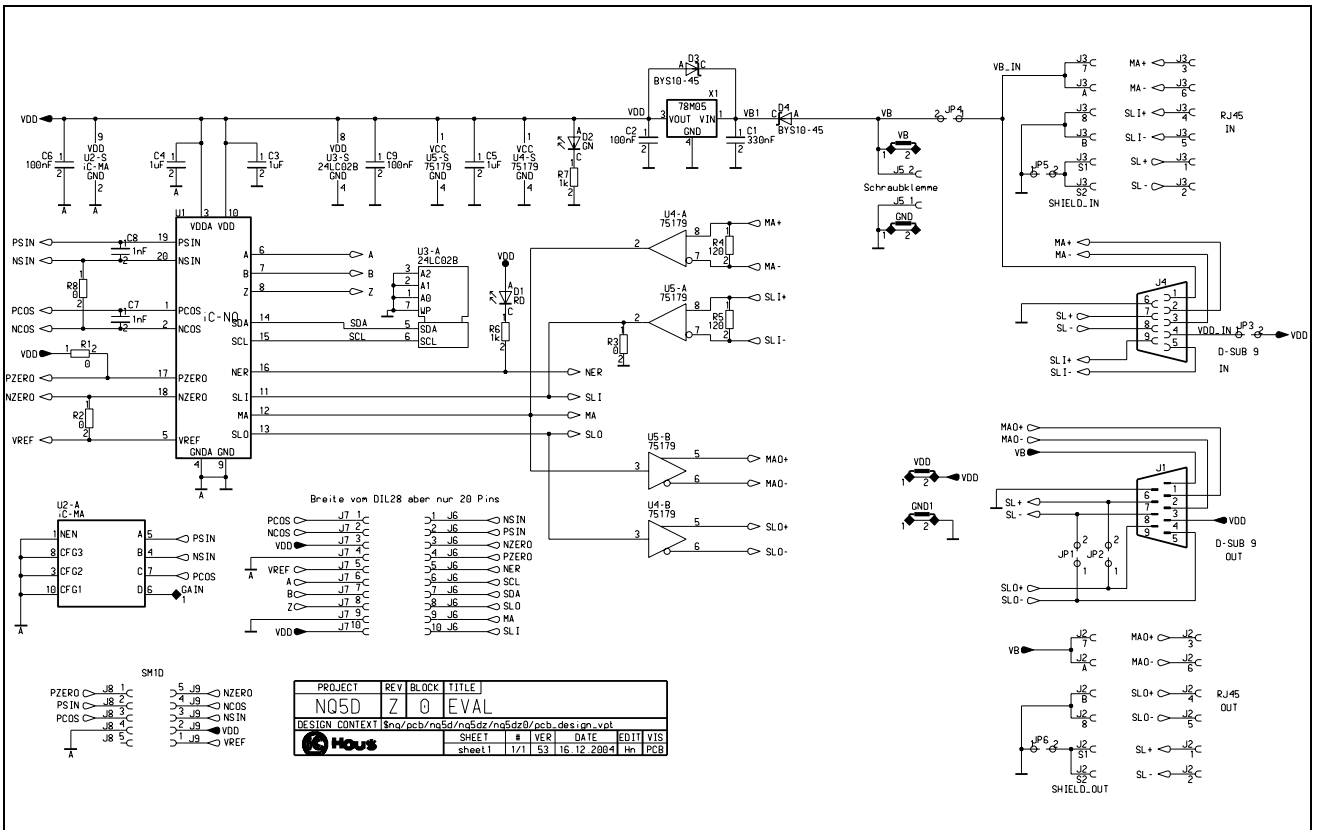


Fig. 2: Circuit diagram of evaluation board NQ5D.

iC-NQ EVAL NQ5D

EVALUATION BOARD DESCRIPTION



Rev A1, Page 3/3

JUMPER and COMPONENT OPTIONS

Item	Connection / Value	Comment
Jumper Options		
JP1	BiSS OUT SL- to SLO-	Connects iC-NQ's data output to the BiSS data line. When cascading several boards only the final board must have closed this jumper, it must be opened for all other boards.
JP2	BiSS OUT SL+ to SLO+	See JP1
JP3	VDD_IN to BiSS IN	Only needed to power MB3A adapter via NQ5D board.
JP4	VB_IN to VB	Instead of supplying the board via its terminal VB and GND, the board can be powered via the BiSS line from the MB3U adapter.
JP5	RJ45-IN shield to ground	Optional ground link to shield of RJ45 plug.
JP6	RJ45-OUT shield to ground	See JP5
Optional Components		
J2	RJ45	BiSS output connector
J3	RJ45	BiSS input connector

This specification is for a newly developed product. iC-Haus therefore reserves the right to change or update, without notice, any information contained herein, design and specification; and to discontinue or limit production or distribution of any product versions. Please contact iC-Haus to ascertain the current data. Copying - even as an excerpt - is only permitted with iC-Haus approval in writing and precise reference to source.

iC-Haus does not warrant the accuracy, completeness or timeliness of the specification on this site and does not assume liability for any errors or omissions in the materials. The data specified is intended solely for the purpose of product description. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information/specification or the products to which information refers and no guarantee with respect to compliance to the intended use is given. In particular, this also applies to the stated possible applications or areas of applications of the product.

iC-Haus conveys no patent, copyright, mask work right or other trade mark right to this product. iC-Haus assumes no liability for any patent and/or other trade mark rights of a third party resulting from processing or handling of the product and/or any other use of the product.