

Rev A1, Page 1/6

ORDERING INFORMATION

Type Order Designation Description Options

Connection Adapter iC334 EVAL IC334

BiSS connection adapter sub-D 9 pole female connector to clamp terminals with optional external sensor power supply (VDD)



Figure 1: iC334 Connection Adapter

ORDERING INFORMATION: RECOMMENDED TOOLS

Туре	Description	Options	Order Designation
PC Adapter	BiSS/SSI-to-PC adapter (USB)		iC-MB3 iCSY MB3U
PC Adapter PC Adapter	BiSS/SSI-to-PC adapter (USB) High performance	For BiSS/SSI master	iC-MB3 iCSY MB3U-I2C iC-MB4 iCSY MB4U
PC Adapter	BiSS/SSI-to-PC adapter (USB) High performance BiSS/SSI-to-PC adapter (USB)	For BiSS/SSI master	iC-MB5 iCSY MB5U



Figure 2: Adapter MB4U

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Rev A1, Page 2/6

EVALUATION KIT: COMPONENT



Figure 3: BiSS/SSI connection adapter iC334 - scope of delivery

ADAPTER iC334

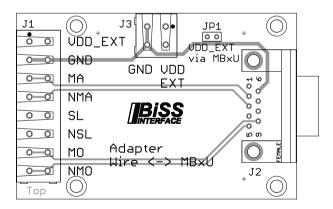


Figure 4: Component side

TERMINAL	DESCRIPTION
J1	Clamp terminal (connection to BiSS/SSI slave or encoder)
J2	Sub-D connector (connection to a BiSS/SSI master interface adapter MBxU)
J3	Clamp terminal for external power supply input (JP1 removed)
JP1	Slave power supply via MBxU (JP1 bridged, default and setting when shipped)



Rev A1, Page 3/6

RELATED PRODUCTS AND DOCUMENTATION

- · Protocol Documentation: BiSS.
 - → Please check website for more information.
- BiSS/SSI Software Installer: Evaluation with BiSS Reader Software ZIP Packages.
 - → Please check BiSS Reader software ZIP installer packages.
 - → BiSS Reader Software with RTE (recommended)
 - → BiSS Reader Software without RTE
- BiSS-to-PC Adapter MBxU Descriptions
 - → http://www.ichaus.de/MB3U_datasheet_en
 - → http://www.ichaus.de/MB4U datasheet en
 - → http://www.ichaus.de/MB5U_datasheet_en

PHYSICAL DIMENSIONS

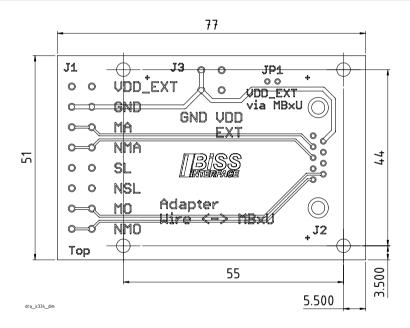


Figure 5: Dimension



Rev A1, Page 4/6

PINOUT OF CONNECTORS AND TERMINALS

J1: BiSS/SSI interface output (Slave/Encoder)

8-pin clamp terminals

PIN	Name	Function
1	VDD_EXT	Power supply
2	GND	0 V ground
3	MA	Clock,
		$Master \to Slave$
4	NMA	Clock,
		$Master \to Slave \ (inverted)$
5	SL	Data line,
		$Slave \to Master$
6	NSL	Data line,
		Slave \rightarrow Master (inverted)
7	MO	Master data output,
		$Master \to Slave$
		(optional, not usable with SSI)
8	NMO	Master data output,
		Master → Slave
		(inverted, optional, not usable
		with SSI)

J2: BiSS interface input (Master)

9-pin Sub D Connector - female

PIN	Name	Function
1	n.c.	not connected
2	MA	Clock,
		$Master \to Slave$
3	NMA	Clock,
		$Master \to Slave$
		(inverted)
4	VDD	+5 V supply voltage
5	NSLI-	Data input
	(NMO)	(inverted, optional Data output
		provided by NMO of BiSS
		Master)
6	GND	0 V ground
7	SL + (SL)	Data line
8	SL - (NSL)	Data line
		(inverted)
9	SLI + (MO)	Data input
		(optional Data output provided
		by MO of BiSS Master)

J3: External Power Supply (Slave)

2-pin clamp terminals

PIN	Name	Function
1	VDD_EXT	Power supply of J1
		Please keep JP1 open before connecting and during an external power supply connection.
2	GND	0 V ground

DESCRIPTION OF JUMPERS

Jumper JP1	Function
Closed	Slave/Encoder power supply via
	MBxU (default and setting when shipped).
Open	Slave/Encoder power supply via J3
	external power supply.

A connected external power supply and a closed (bridged) jumper JP1 at the same time may cause damages do the connected devices.



Rev A1, Page 5/6

CIRCUIT SCHEMATIC

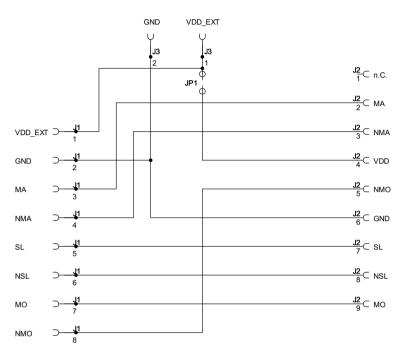


Figure 6: Circuit diagram iC334

ASSEMBLY PART LIST

Device	Value (typical)	Comment
J1	MRT1P5.08-08	Clamp terminal 8-pin, double W8x1
J2	Sub-D 9 pol. (female)	Sub-D connector
J3	MRT1P5.08-02	Clamp terminal 2-pin, double W2x1
JP1	SLLP10972G	Jumper 2-pin

Table 1: Board IC334

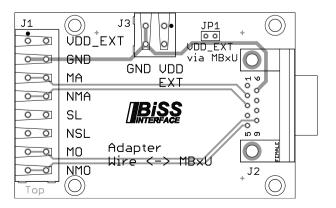


Figure 7: Board IC334 - top side



Rev A1, Page 6/6

ADAPTER MOUNTING EXAMPLE



Figure 8: IC334 connected to iC-MB5 iCSY MB5U

External Power Supply

The connected sensor at clamp terminals J1 can be supplied with an external power supply via J3. In this case JP1 must be removed (not bridged). The grounds of connectors J1, J2 and J3 (signal GND) are connected together.

Power Supply via MBxU

The connected sensor at clamp terminals J1 can be supplied from the interface adapter MBxU via connector J2 pin 4 (signal VDD). In this case be ensure that no external power supply is connected.

REVISION HISTORY

Rel.	Rel. Date*	Chapter	Modification	Page
A1	2018-05-09		Initial Version	All

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^{*} Release Date format: YYYY-MM-DD