ORDERING INFORMATION

These evaluation kits include a populated sensor board (type PNH1M, assembled with iC-PNxxxx according to the order designation), a LED-PCB (assembled with LED iC-SD85 BLCC SD1C), a suitable code disc (see table below), an additional LED sample (iC-TL85 TO46-2L1), and a connection cable to MN1D.
Please refer to Page 2 for an overview of kit parts.

Type	Order Designation	CPR* / Resolution**	Code Disc
Evaluation kit	iC-PN2656 EVAL PNH1M	256 CPR / 21 bit	LSHC4S 26-256N (⌀ 26.0 mm, glass)
	iC-PN2612 EVAL PNH1M	512 CPR / 22 bit	LSHC11S 26-512N (⌀ 26.0 mm, glass)
	iC-PN2624 EVAL PNH1M	1024 CPR / 23 bit	LSHC1S 26-1024N (⌀ 26.0 mm, glass)

*) cycles per revolution
**) interpolated by iC-MN

BOARD PNH1M

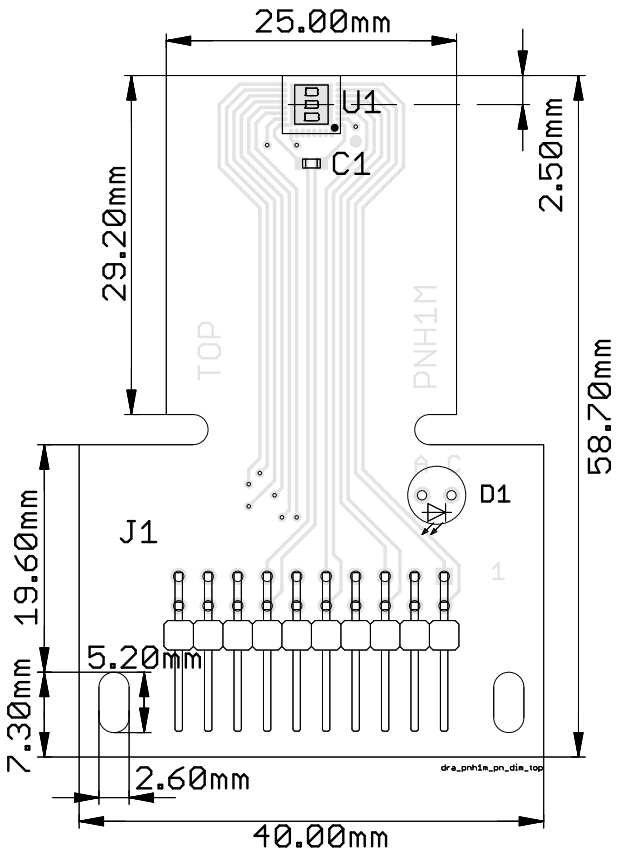

Figure 1: Sensor board PNH1M (top view)

PLUG	CONFIGURATION
J1	Signal output connector (pinout suits connector J5 of iC-MN EVAL MN1D)
D1	LED connector (anode / cathode)

ASSEMBLED COMPONENTS

U1	iC-PNxxxx
C1	Capacitor 100 nF
J1	2x10-pin connector - male
D1	1x2-pin connector - female

OVERVIEW OF KIT ITEMS

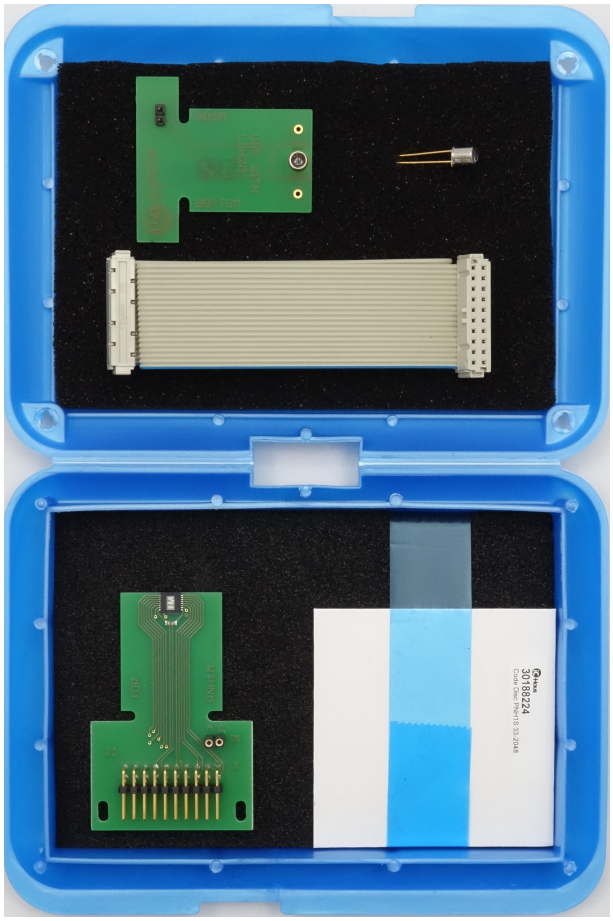

Figure 2: Scope of delivery.
Top: LED PCB, LED sample, and connection cable.
Bottom: sensor board and code disc (hub not included).

RELATED PRODUCTS AND DOCUMENTATION

- iC-PN26xx Documentation
  → http://www.ichaus.de/PN26
- Code Disc Datasheets
  → http://www.ichaus.de/PN26
- LED Datasheets
  → http://www.ichaus.de/SD85
  → http://www.ichaus.de/TL85
- iC-MN Documentation
  → http://www.ichaus.de/MN
- iC-MN Demo Board Software (GUI)
  → http://www.ichaus.de/MN
- PC-USB Adapter Description
  → http://www.ichaus.de/MB4U_datasheet_en
- Tools: SinCosYzer Workstation
  (signal acquisition and graphical analysis)
  → http://www.ichaus.de/product/SinCosYzer2

CONNECTOR AND TERMINAL PINOUT

J1: Signal Output
2x10-pin connector - male

PIN	Name	Function
1	PS_S	Signal Output Sine + (Segment)
2	NS_S	Signal Output Sine - (Segment)
3	PC_S	Signal Output Cosine + (Segment)
4	NC_S	Signal Output Cosine - (Segment)
5	PS_M	Signal Output Sine + (Master)
6	NS_M	Signal Output Sine - (Master)
7	PC_M	Signal Output Cosine + (Master)
8	NC_M	Signal Output Cosine - (Master)
9	PS_N	Signal Output Sine + (Nonius)
10	NS_N	Signal Output Sine - (Nonius)
11	PC_N	Signal Output Cosine + (Nonius)
12	NC_N	Signal Output Cosine - (Nonius)
13	GND	Ground
14	VCC	+4.5 ... 5.5 V Supply Voltage
15	LED_A	Terminal to LED Anode
16	LED_C	Terminal to LED Cathode
17	n. c.	
18	VREF	Reference Voltage Output
19	n. c.	
20	n. c.	

D1: LED
1x2-pin connector - female

PIN	Name	Function
A	LED_A	LED Anode
B	LED_C	LED Cathode

CIRCUIT SCHEMATIC

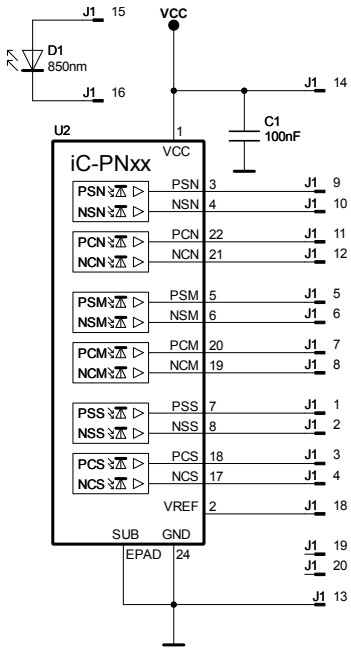

Figure 3: Circuit diagram

APPLICATION EXAMPLES

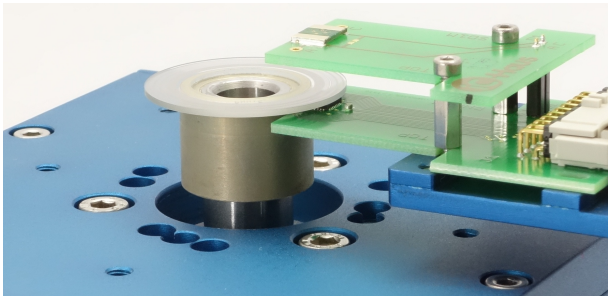

Figure 4: Principle assembly

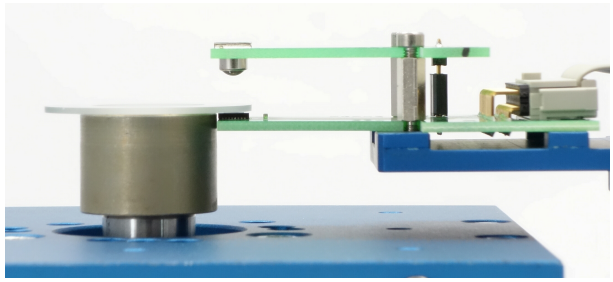

Figure 5: Aligned assembly, side view

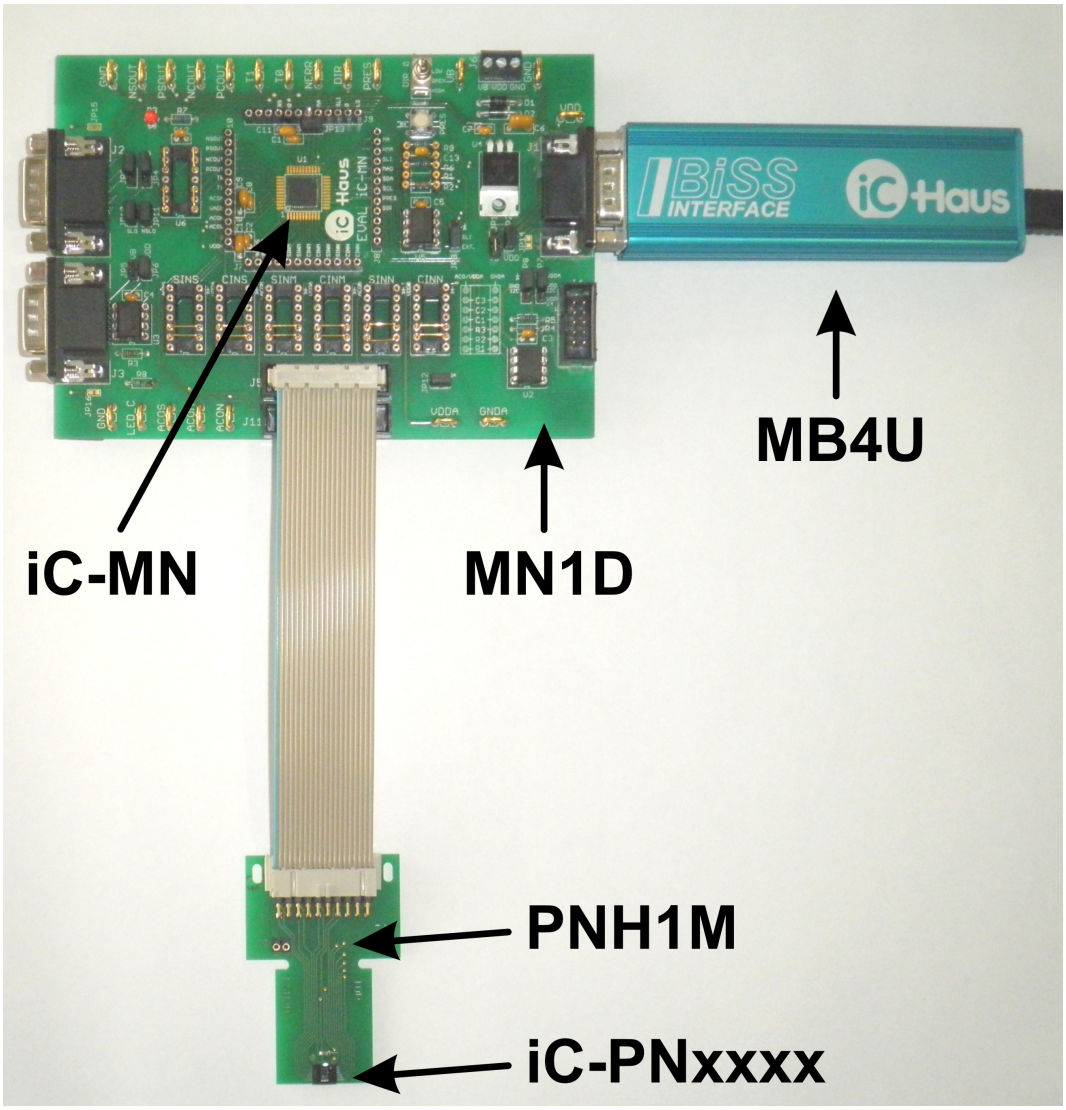

Figure 6: Connection to iC-MN EVAL MN1D

REVISION HISTORY

Rel.	Rel. Date*	Chapter	Modification	Page
A1	2015-05-22		Initial release	all

* Release Date format: *YYYY-MM-DD*