

iC-PTxxxx EVAL LT2M

EVALUATION KIT DESCRIPTION



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ORDERING INFORMATION

Ready-to-operate evaluation kits include PCB LT2M populated with iC-PTxxxx (according to order designation), LED-PCB populated with iC-SD85 BLCC SD1C, the suitable code disc (see included code disc), and an additional LED sample iC-TL85 TO46-2L1. All kit parts are shown in Figure 2.

Type	Order Designation	Resolution	Included Code Disc
Evaluation kit	iC-PT3310 EVAL LT2M	1000 CPR	Code disc PT2S 33-1000 (∅ 33.2 mm, glass)
	iC-PT3313 EVAL LT2M	1250 CPR	Code disc PT1S 33-1250 (∅ 33.2 mm, glass)
	iC-PT3320 EVAL LT2M	2000 CPR	Code disc PT4S 33-2000 (∅ 33.2 mm, glass)
	iC-PT3324 EVAL LT2M	1024 CPR	Code disc PT3S 33-1024 (∅ 33.2 mm, glass)
	iC-PT3325 EVAL LT2M	2500 CPR	Code disc PT5S 33-2500 (∅ 33.2 mm, glass)
	iC-PT2610 EVAL LT2M	1000 CPR	Code disc PT15S 26-1000 (∅ 26.0 mm, glass)
	iC-PT2613 EVAL LT2M	1250 CPR	Code disc PT6S 26-1250 (∅ 26.0 mm, glass)
	iC-PT2650 EVAL LT2M	500 CPR	Code disc PT13S 26-500 (∅ 26.0 mm, film)
	iC-PT2656 EVAL LT2M	256 CPR/ 250 CPR	Code disc PT14S 26-256 (∅ 26.0 mm, film)/ Code disc PT16S 26-250 (∅ 26.0 mm, film)

CPR: cycles per revolution

BOARD AND TERMINAL DESCRIPTION

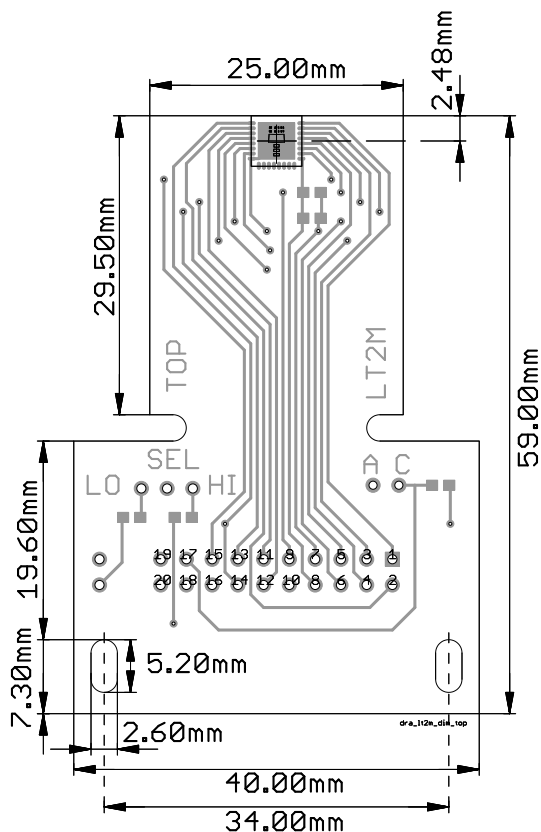


Figure 1: Board LT2M (top view)

PLUG CONFIGURATION

J1	Signal output connector
D1	LED connector (anode / cathode)
JP1	Jumper to select resolution

ASSEMBLED COMPONENTS

X	iC-PTxxxx
C1	Capacitor 100 nF
C2	Capacitor 1 μF
R1	Pull-up resistor 1 kΩ
R2	Pull-down resistor 1 kΩ
R3	LED resistor 47 Ω
J1	2x10-pin connector - male
JP1	1x3-pin jumper
D1	1x2-pin connector - female

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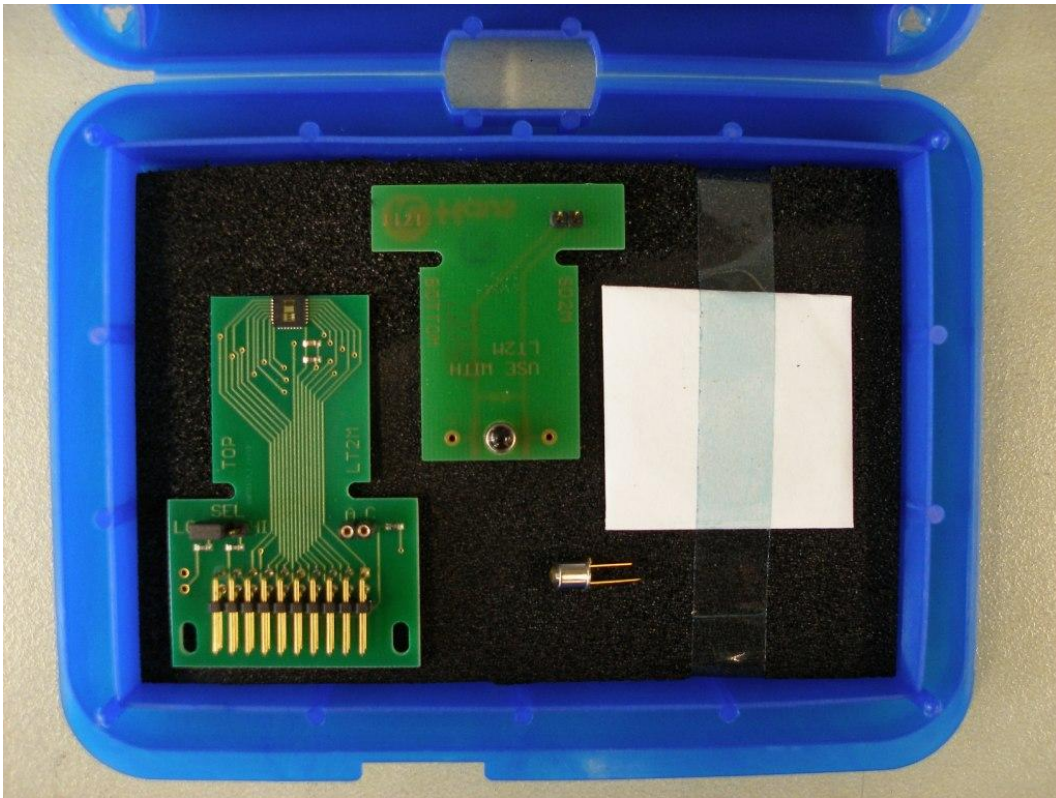


Figure 2: Evaluation kit

CIRCUIT DESCRIPTION

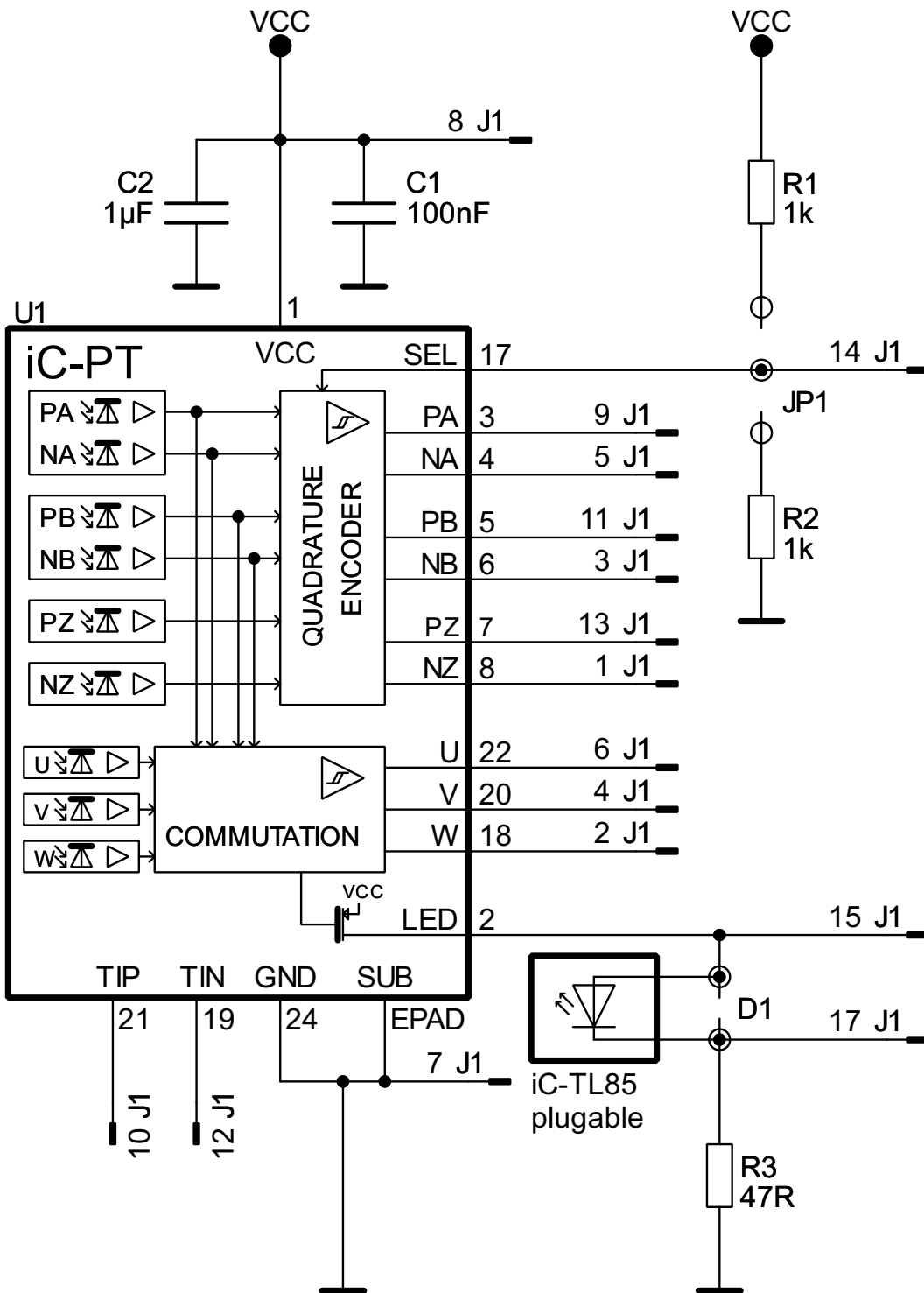


Figure 3: Circuit diagram

CONNECTOR PINOUT

J1: Signal Output

2x10-pin connector - male

PIN	Name	Function
1	NZ	Push-Pull Output Z- / Analog Z-
2	W	Push-Pull Output W / Analog W
3	NB	Push-Pull Output B- / Analog Cos-
4	V	Push-Pull Output V / Analog V
5	NA	Push-Pull Output A- / Analog Sin-
6	U	Push-Pull Output U / Analog U
7	GND	Ground
8	VCC	+3.5V to 5.5V Supply Voltage
9	PA	Push-Pull Output A+ / Analog Sin+
10	TIP	Positive Test Current Input
11	PB	Push-Pull Output B+ / Analog Cos+
12	TIN	Negative Test Current Input
13	PZ	Push-Pull Output Z+ / Analog Z+
14	SEL	Op. Mode Selection Input
15	LED	Terminal to LED Anode
16	Pin 23	oQFN32-5x5 package
17	Cath. D1	Terminal to LED Cathode
18	n. c.	
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

APPLICATION EXAMPLE

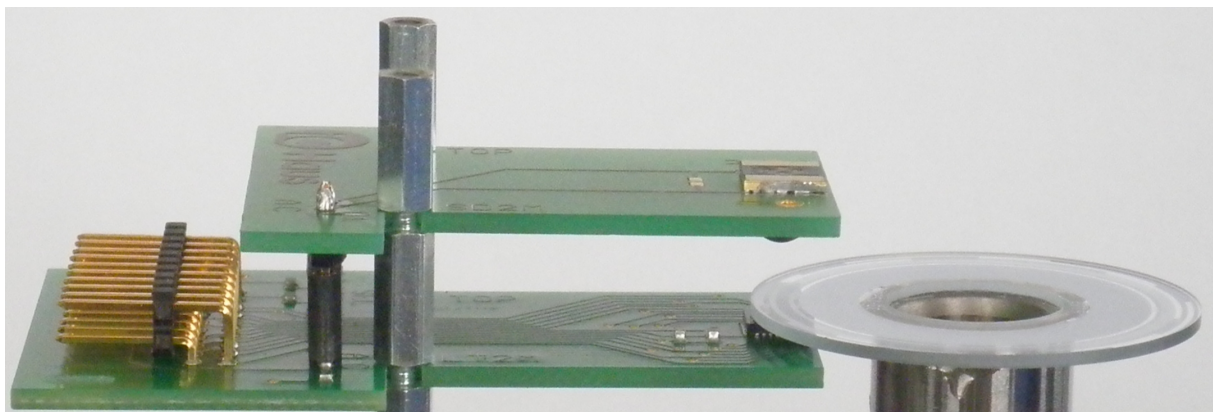


Figure 4: Encoder test application with eval kit iC-PTxxxx EVAL L2TM

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RELATED PRODUCTS AND DOCUMENTATION

Item	Description	Documentation and Information
iC-PT3310 PT2S 33-1000	Phased Array Opto Encoder Code disc for iC-PT3310	http://www.ichaus.de/product/iC-PT33xx
iC-PT3313 PT1S 33-1250	Phased Array Opto Encoder Code disc for iC-PT3313	
iC-PT3320 PT4S 33-2000	Phased Array Opto Encoder Code disc for iC-PT3320	
iC-PT3324 PT3S 33-1024	Phased Array Opto Encoder Code disc for iC-PT3324	
iC-PT3325 PT5S 33-2500	Phased Array Opto Encoder Code disc for iC-PT3325	
iC-PT2610 PT15S 26-1000	Phased Array Opto Encoder Code disc for iC-PT2610	http://www.ichaus.de/product/iC-PT26xx
iC-PT2613 PT6S 26-1250 PT8S 26-1250	Phased Array Opto Encoder Code disc for iC-PT2613 (glass) Code disc for iC-PT2613 (plastic)	
iC-PT2650 PT13S 26-500	Phased Array Opto Encoder Code disc for iC-PT2650	
iC-PT2656 PT14S 26-256 PT14S 26-250	Phased Array Opto Encoder Code disc for iC-PT2656 Code disc for iC-PT2656	
iC-TL85 TO46-2L1 iC-SD85 BLCC SD1C	Collimated Encoder LED, 850 nm, with lens Collimated Encoder LED, 850 nm, with lens, SMT	http://www.ichaus.de/product/iC-TL85 http://www.ichaus.de/product/iC-SD85

REVISION HISTORY

Rev	Notes	Pages affected
A1	Initial version	
A2	Completion of kits for iC-PT26xx and iC-PT33xx types	1, 5

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