

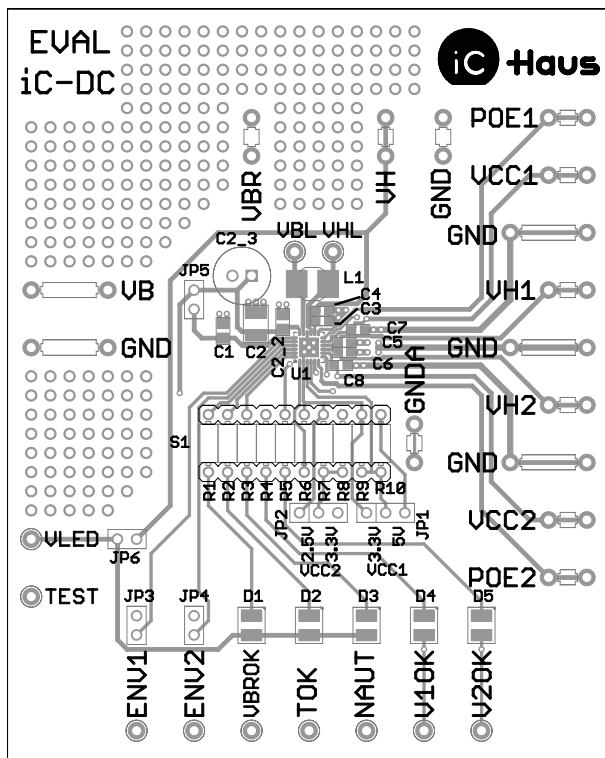
iC-DC EVAL DC1D

EVALUATION BOARD DESCRIPTION

ORDERING INFORMATION

Type	Order Designation	Description Options
Evaluation Board	iC-DC EVAL DC1D	iC-DC Evaluation Board

BOARD DC1D



dra_dc1d_spec_top

Figure 1: Evaluation board DC1D

TERMINAL	DESCRIPTION
VB	+4 V to +36 V Supply Voltage
GND	0 V Ground
VBR	Reverse Polarity Protected Supply Voltage
VH	
VBL	Inductor
VHL	Inductor
POE1	Supply Switch 1
VCC1	Linear Regulator 1
VH1	Switching Regulator 1
POE2	Supply Switch 2
VCC2	Linear Regulator 2
VH2	Switching Regulator 2
ENV1	Enable Linear Regulator 1
ENV2	Enable Linear Regulator 2
VBROK	VBR Voltage Monitoring
TOK	Thermal Shutdown
NAUT	Autarkie Detection
V10K	VCC1 Voltage Monitoring
V20K	VCC2 Voltage Monitoring
VLED	LED Voltage D1, D2, D3
TEST	Test Input

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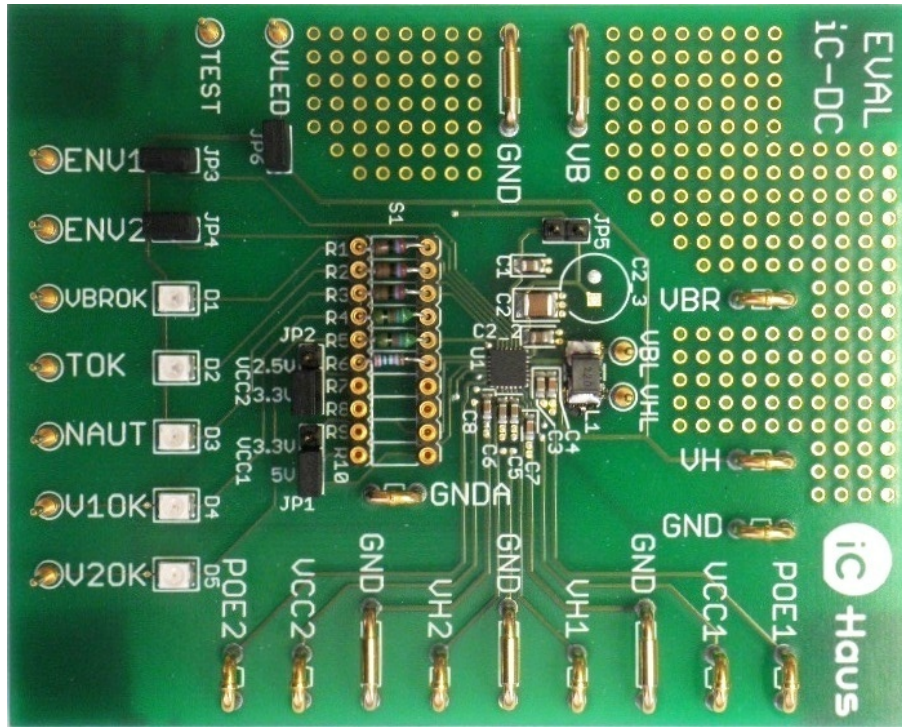


Figure 2: Top view

ASSEMBLY PART LIST

Device	Value (typical)	Comment
C1, C2_2	1 μ F	
C2	10 μ F	
C4	1 μ F	
C3, C5, C6	4.7 μ F	
C7, C8	1 μ F	
D1, D2	SMD LED	Color red
D3	SMD LED	Color orange
D4, D5	SMD LED	Color green
JP1, JP2	SL LP1/097 3G	Jumper 3 pol.
JP3 - JP6	SL LP1/097 2G	Jumper 2 pol.
L1	22 μ H	Inductor
U1	iC-DC	Programable 2 Channel Buck/Boost DC/DC Converter
R1 - R3	2.7 kOhm	
R4, R5	560 Ohm	
R6	20 kOhm	
S1A, S1B	Socket MK0110G	Socket for resistors R1 - R10

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EVALUATION BOARD DESCRIPTION

CIRCUIT DESCRIPTION

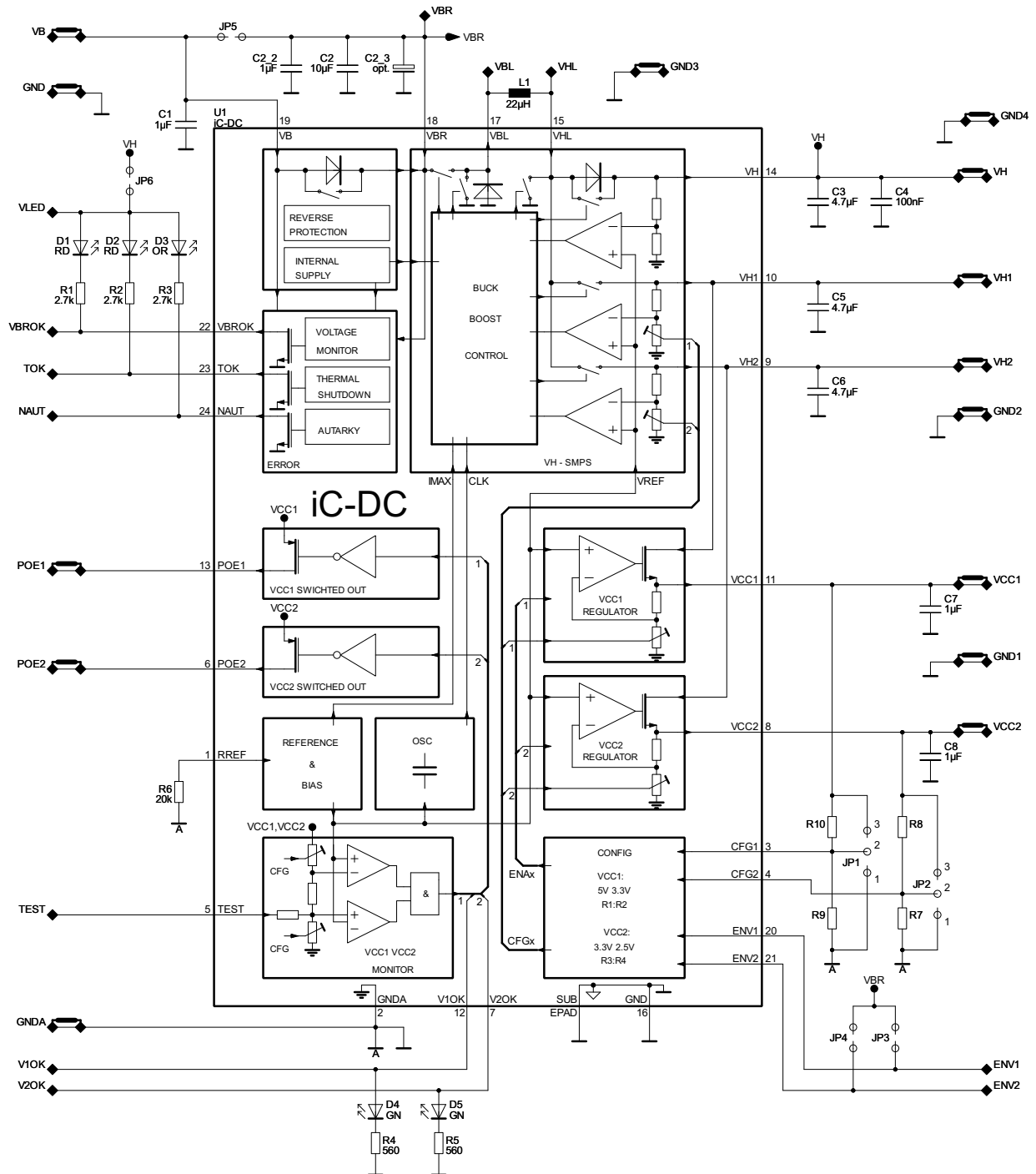


Figure 3: Circuit diagram including optional components

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JUMPER DESCRIPTION

Output Voltage Configuration

Jumper	Pin 1	Pin 2	Pin 3
JP1	GNDA (3.3 V)	CFG1	VCC1 (5.0 V)
JP2	GNDA (2.5 V)	CFG2	VCC2 (3.3 V)

Configuration

Jumper	Pin 1	Pin 2	Comment
JP3	ENV1	VBR	Enable VCC1
JP4	ENV2	VBR	Enable VCC2
JP5	VB	VBR	Disable reverse polarity protection (bridged)
JP6	VH	VLED (LED Anode)	LED supply

RELATED DOCUMENTS

- iC-DC Data Sheet - Specification -

→ <http://www.ichaus.de/product/iC-DC>

REVISION HISTORY

Rev	Notes	Pages affected
A1	Initial version	

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