

iC-MFP EVAL MFP1D

EVALUATION BOARD DESCRIPTION

ORDERING INFORMATION

Type	Order Designation	Description Options
Evaluation Board	iC-MFP EVAL MFP1D	Evaluation Board iC-MFP Ready-to-operate, pin-configurable, with onboard P-FET

BOARD MFP1D

(size 100 mm x 80 mm)

TERMINAL DESCRIPTION

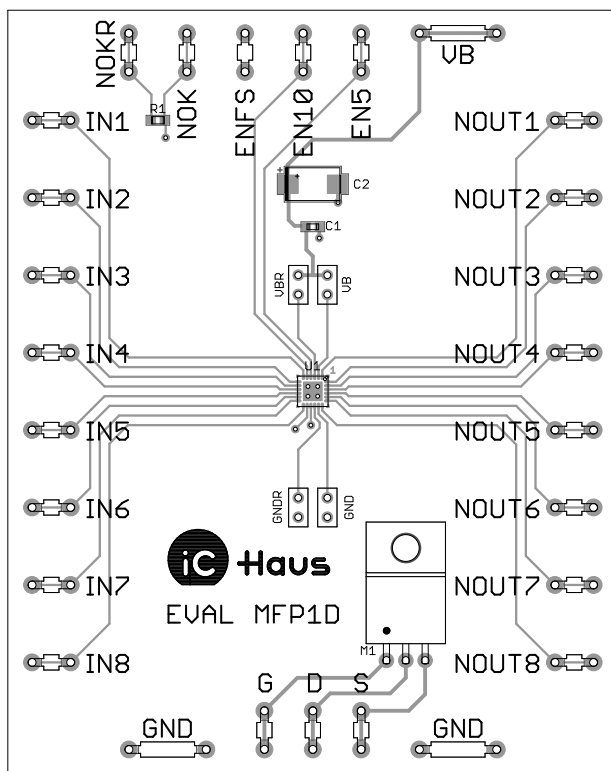


Figure 1: Component side

VB	VB Supply Voltage
VBR	VBR Supply Voltage (Reference)
GND	0 V Ground
GNDR	0 V Ground (Reference)
IN1	Signal Input 1
IN2	Signal Input 2
IN3	Signal Input 3
IN4	Signal Input 4
IN5	Signal Input 5
IN6	Signal Input 6
IN7	Signal Input 7
IN8	Signal Input 8
OUT1	Output 1
OUT2	Output 2
OUT3	Output 3
OUT4	Output 4
OUT5	Output 5
OUT6	Output 6
OUT7	Output 7
OUT8	Output 8
NOK	Output NOK
NOKR	Pull Resistor Supply NOK
EN5	Enable Input 5V
EN10	Enable Input 10V
ENFS	Enable Input Full Scale
G	Evaluation FET Gate
D	Evaluation FET Drain
S	Evaluation FET Source

iC-MFP EVAL MFP1D

EVALUATION BOARD DESCRIPTION



Rev A1, Page 2/4

CONNECTOR AND TERMINAL PINOUT

Input Connector

Name	Function
IN1	Input Channel 1
IN2	Input Channel 2
IN3	Input Channel 3
IN4	Input Channel 4
IN5	Input Channel 5
IN6	Input Channel 6
IN7	Input Channel 7
IN8	Input Channel 8

Safe Power Supply

Name	Function
VB	Power Supply Input
GND	Ground

Enable Input

Name	Function
EN5	Enable 5V Output Level
EN10	Enable 10V Output Level
ENFS	Enable Full Scale Output Level

Output Connector

Name	Function
OUT1	Output Channel 1
OUT2	Output Channel 2
OUT3	Output Channel 3
OUT4	Output Channel 4
OUT5	Output Channel 5
OUT6	Output Channel 6
OUT7	Output Channel 7
OUT8	Output Channel 8

Enable Input

Name	Function
NOK	Error Output, low active, Open Collector
NOKR	Pull Up Resistor Supply for NOK Pin

Evaluation FET

Name	Function
G	Gate Connector
D	Drain Connector
S	Source Connector

iC-MFP EVAL MFP1D

EVALUATION BOARD DESCRIPTION

CIRCUIT DESCRIPTION

The MFP1D evaluation board is equipped with the iC-MFP 8-Channel Fail-Safe FET Driver IC. The board features connectors for each IC pin and an evaluation FET for direct use. Power supply failures are directly testable by jumper removal.

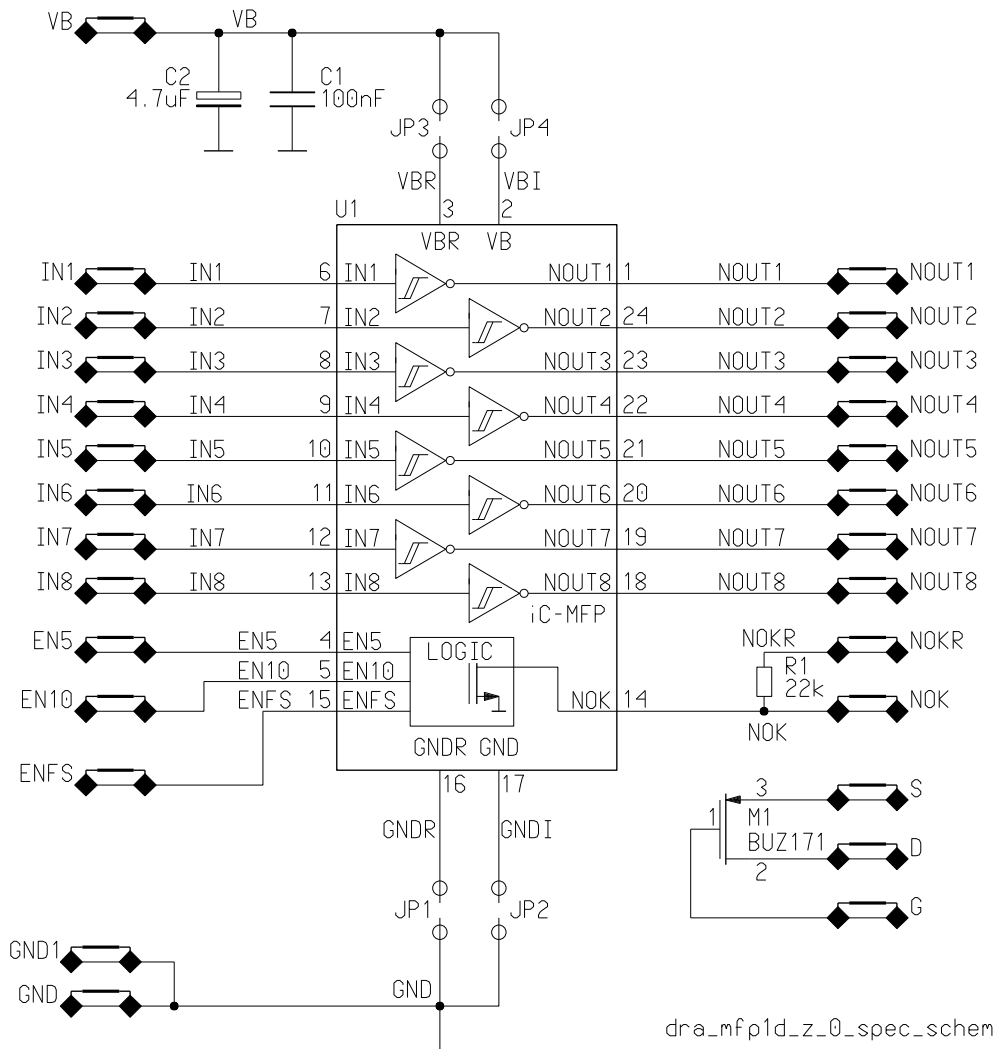


Figure 2: Circuit diagram including FET

iC-MFP EVAL MFP1D

EVALUATION BOARD DESCRIPTION



Rev A1, Page 4/4

JUMPER DESCRIPTION

Closed Jumper	Comments
JP1	VB Power Supply to VBR (Reference) (shipment setup)
JP2	VB Power Supply to VB (shipment setup)
JP3	Ground Connectivity to GNDR (Reference) (shipment setup)
JP4	Ground Connectivity to GND (shipment setup)

ASSEMBLY PART LIST

Device	Value (typical)	Comment
U1	iC-MFP QFN24	8-Channel Fail-Safe P-FET Driver
M1	BUZ 171 TO220	P-FET
C1	4.7 μ F	Supply Backup Capacitor
C2	100 nF	Supply Backup Capacitor
JP1, JP2, JP3, JP4	SL LP1 097 2 G	Jumper

REVISION HISTORY

Rel.	Rel. Date*	Chapter	Modification	Page
A1	2017-05-26	All	Initial Release	all

iC-Haus expressly reserves the right to change its products and/or specifications. An Infoletter gives details as to any amendments and additions made to the relevant current specifications on our internet website www.ichaus.com/infoletter and is automatically generated and shall be sent to registered users by email. Copying – even as an excerpt – is only permitted with iC-Haus' approval in writing and precise reference to source.

The data specified is intended solely for the purpose of product description and shall represent the usual quality of the product. In case the specifications contain obvious mistakes e.g. in writing or calculation, iC-Haus reserves the right to correct the specification and no liability arises insofar that the specification was from a third party view obviously not reliable. There shall be no claims based on defects as to quality in cases of insignificant deviations from the specifications or in case of only minor impairment of usability.

No representations or warranties, either expressed 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 products are not designed for and must not be used in connection with any applications where the failure of such products would reasonably be expected to result in significant personal injury or death (*Safety-Critical Applications*) without iC-Haus' specific written consent. Safety-Critical Applications include, without limitation, life support devices and systems. iC-Haus products are not designed nor intended for use in military or aerospace applications or environments or in automotive applications unless specifically designated for such use by iC-Haus.

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.

Software and its documentation is provided by iC-Haus GmbH or contributors "AS IS" and is subject to the ZVEI General Conditions for the Supply of Products and Services with iC-Haus amendments and the ZVEI Software clause with iC-Haus amendments (www.ichaus.com/EULA).

* Release Date format: YYYY-MM-DD