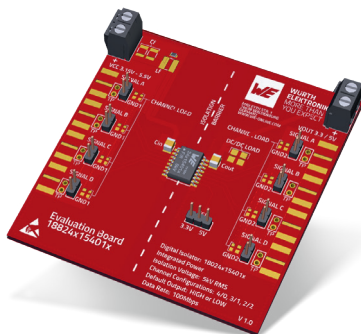


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QUICK START GUIDE

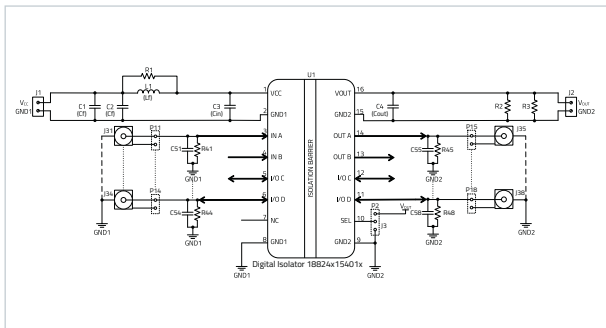
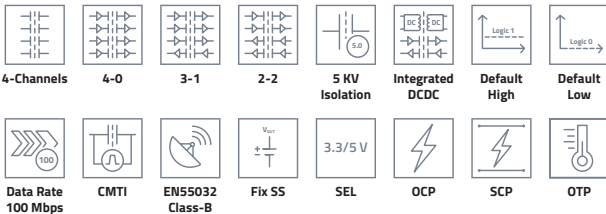
**Digital Isolator Evaluation
Board for 18024x15401x SOIC-16WB**

Evaluation Board 18824x15401x

Version 1.0

SCHEMATIC

Features



For accurate V_{IN} and V_{OUT} voltage measurements it is recommended to measure directly at the input and output capacitors. It is **not** recommended to use this evaluation board with input and output wire lengths longer than 1 m.

For the datasheet of the digital isolators visit us at: www.we-online.com/wpme-cdip



This product is highly sensitive to electrostatic discharge (ESD). As such, always use proper ESD precautions when handling. Failing to follow the aforementioned recommendations can result in severe damage to the part.

Evaluation Board P/N	Digital Isolator P/N	Channel configurations	Default Output
18824015401H	18024015401H	4/0	High
18824015401L	18024015401L		Low
18824115401H	18024115401H	3/1	High
18824115401L	18024115401L		Low
18824215401H	18024215401H	2/2	High
18824215401L	18024215401L		Low

Ref. Des.	Description (Order Code)
U1	4 channel digital isolator with integrated DC-DC converter (18024x15401x)
C1, C2	Filter ceramic chip capacitor 10 μ F, 16V, X7R, 1210 (opt.) (885012209014)
C3, C4	Ceramic chip capacitor 10 μ F, 16V, X7R, 1210 (885012209014)
C51...C58	Channel Load ceramic chip capacitor 0603 (optional)
J1, J2	Screw Terminal Block (691502710002)
J3	Jumper for selection output voltage of integrated DC/DC converter (609002115121)
J31...J38	SMA connector (optional) (60312202114509)
L1	Filter SMD Inductor 4u7H (optional) (744773047)
P11...P18	THT 2-pin header (61300211121)
P2	THT 3-pin header (61300311121)
R1	Shunt SMD Resistor 0 Ω , 0603
R2, R3	DC/DC Load SMD Resistor, 1206 (optional)
R41...R48	Channel Load SMD Resistor, 0603 (optional)

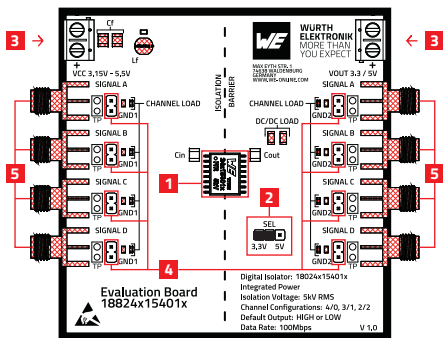


WARNING!
Before operating read
the attached important
notice document!

For Layout, Gerber and
Step files visit us on
[www.we-online.com/
wpme-cdip](http://www.we-online.com/wpme-cdip)



OVERVIEW



■ Default jumper position

Description

V_{CC} 3.15 – 5.5V
 V_{OUT} 3.3 or 5V
 V_{ISO} 5kV_{RMS}
DR up to 100Mbps

- 1 CDIP Capacitive Digital Isolator Powered SOIC-16WB
 - 2 Jumpers (J3) for selection output voltage of integrated DC/DC converter
 - 3 Terminal block screw connectors for V_{CC} and V_{OUT}
 - 4 THT 2-pin headers for input and output digital signals
 - 5 SMA connectors (optional) for input and output digital signals
- Optional components

Absolute maximum ratings

Caution: Exceeding the abs. max. values given in the datasheet may affect the device negatively and may cause permanent damage.

This evaluation board is intended to be operated in a research and development environment under the supervision of qualified technicians and engineers who are trained and experienced in the safe use of electronics. This evaluation board was designed and tested according to CISPR32 Class B standards under Würth Elektronik laboratory test conditions, as indicated in the data sheet of

the corresponding digital isolator. Operation in other test setups may cause unintended electrical behavior and exceed the stated performance and limits imposed by the CIS-PR32 Class B standards. This evaluation board is not intended for usage in final applications. This evaluation board is not intended for resale.

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