

# MAKE THE RIGHT CHOICE

RELIABLE GALVANIC ISOLATION, SIMPLIFIED!

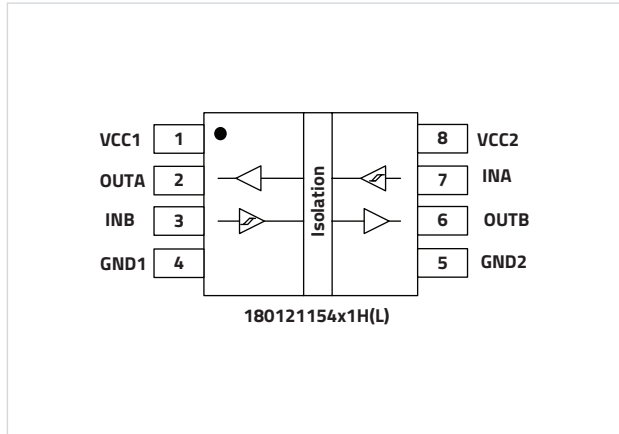
The new compact digital isolators are designed to provide a robust & safe isolation for high speed communication circuits. The isolators are available with and without integrated DC/DC converter. More on [REDEXPERT](#) & online catalogue.

WÜRTH ELEKTRONIK MORE THAN YOU EXPECT

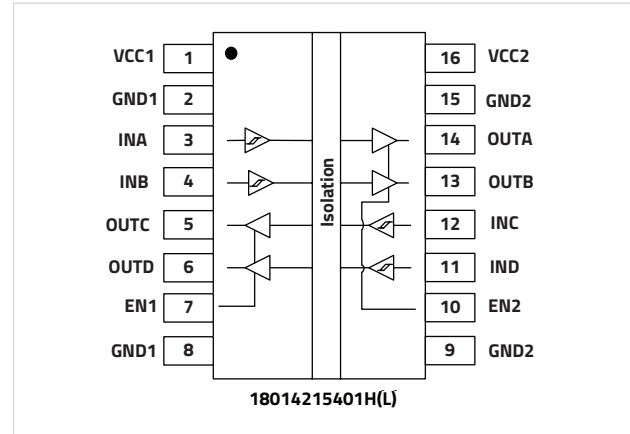


## WPME-CDIS CAPACITIVE DIGITAL ISOLATOR STANDARD

### Example: 1/1, SOIC-8NB or SOIC-8WB



### Example: 2/2, SOIC-16WB



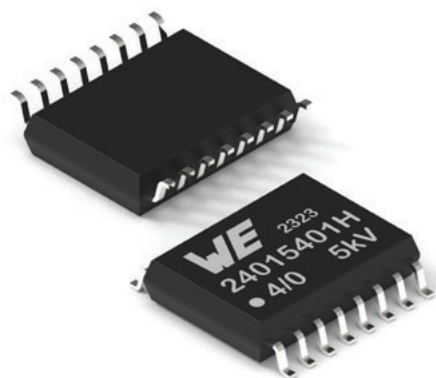
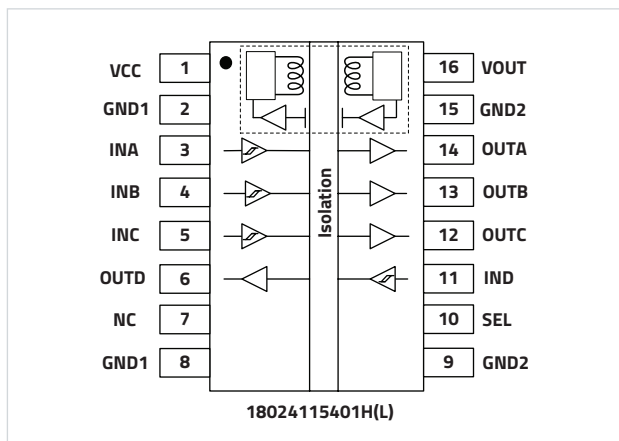
Oder Code	18012x154x1x	18014x15401x
Number of Channels	2	4
Channel Configurations	2/0, 1/1	4/0, 3/1, 2/2
Default Output	High or Low	
Data Rate Max	150 Mbps	
Isolation Voltage	3750 VRMS	5000 VRMS
Package	SOIC-8NB	SOIC-8WB
Type of Isolation	Basic	Reinforced

- 2 and 4 channels
- CMTI: 150 kV/μs
- Propagation delay: 12 ns typ.
- Supply voltage: 2.375 to 5.5 V
- Ambient temperature: -40°C to 125°C
- UL 1577 recognized (UL File No: E535458)
- DIN EN IEC 60747-17 (VDE 0884-17):2021-10 certification (Certificate no. 40058069 and 40058073)



## WPME-CDIP CAPACITIVE DIGITAL ISOLATOR POWERED

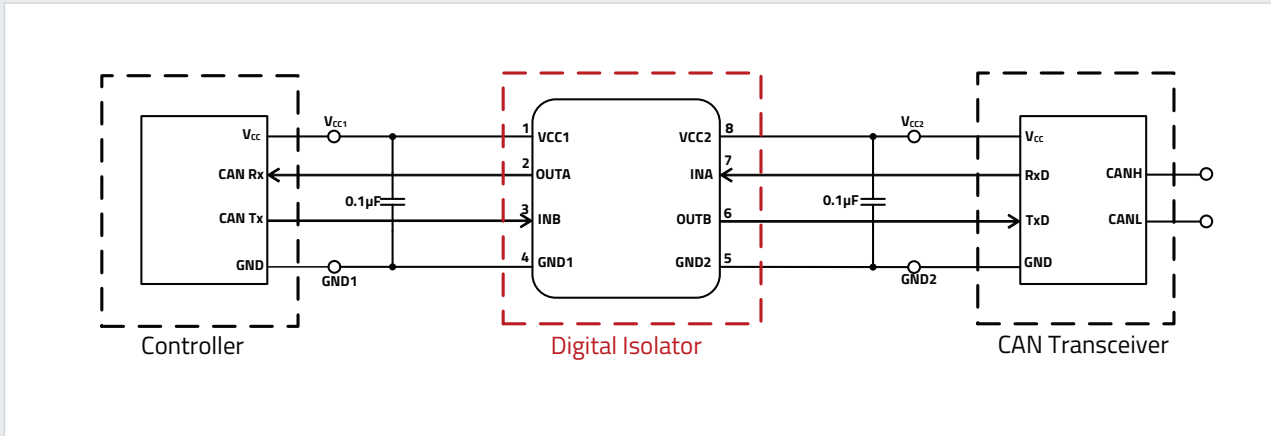
### Example: 3/1, SOIC-16WB



Oder Code	18024x15401x
Number of Channels	4
Channel Configurations	4/0, 3/1, 2/2
Default Output	High or Low
Data Rate Max	100 Mbps
Isolation Voltage	5000 VRMS
Package	SOIC-16WB
Type of Isolation	Reinforced

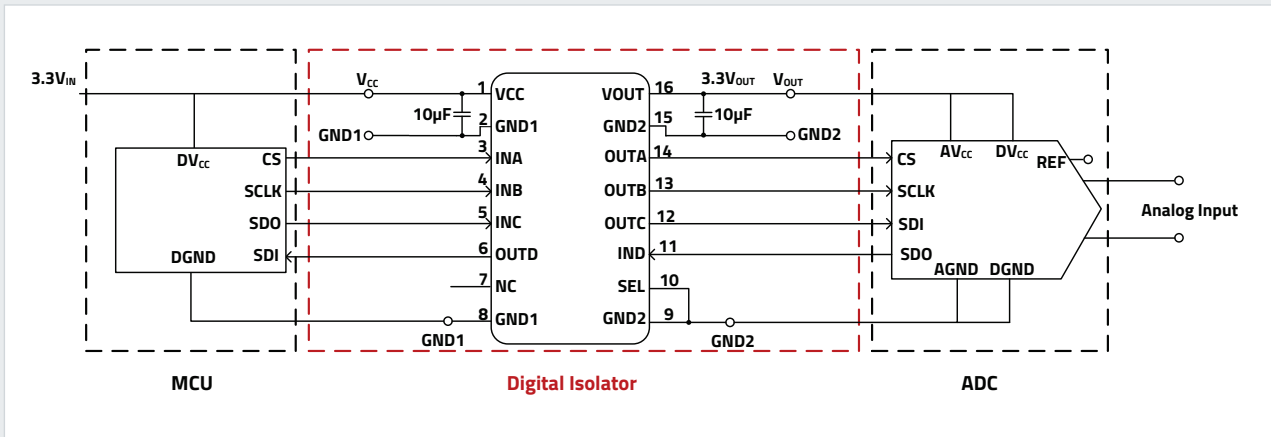
- 4 channels
- Integrated 0.65W Isolated DC/DC Power Converter
- CMTI: 150 kV/μs
- Propagation delay: 10 ns typ.
- Supply voltage: 3.15 to 5.5 V
- Output of DC/DC converter: 3.3 or 5 V
- Ambient temperature: -40°C to 125°C
- UL 1577 recognized (UL File No: E535458)
- DIN EN IEC 60747-17 (VDE 0884-17):2021-10 certification (Certificate no. 40058069)

### Application example CAN-Bus: 2 channel unpowered digital isolator



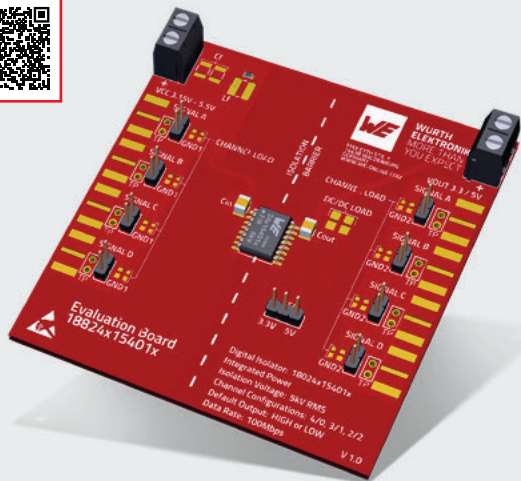
- Digital isolators and isolated power supplies in combination eliminate ground loops
- Digital isolators placed between the CAN transceiver and the local CAN controller
- Isolated power module for both the primary and the secondary side of the digital isolator

### Application example SPI-Bus: 4 channel digital isolator with integrated DC/DC



- SPI interface for communication between the analog-to-digital converter and MCU
- The use of a digital isolators with an integrated isolated DC/DC converter significantly reduce the number of components in the design and saves space on the PCB

### Evaluation Boards 18824x15401x



- 4 channel digital isolator with integrated 0.65 W isolated DC/DC converter
- Supply voltage: **3.15 to 5.5 V**
- DC/DC converter output **3.3 or 5 V** (selectable via jumper)
- The footprints of the optional input filter are optimized for SMT assembly
- Low propagation delay: **10 ns typical**
- High speed data rate up to **100 Mbps**
- Header pins or optional edge mounted SMA connectors (must be ordered separately if necessary) for signal sources
- Conducted and radiated EMI compliant according to EN55032 / CISPR32 class B



Check out **REDEXPERT** for more data and application examples

## SERVICE & SUPPORT



### Design-In Support

- Product related & application specific support by hotline
- Troubleshooting and individual design solutions



### Layout Review Support

- Individual review of customer layouts
- Reference layout examples given in every datasheet also available as Altium design files as free download



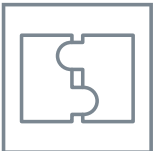
### Thermal Design Support

- Temperature distribution
- Total power handling
- Thermal behaviour of power modules as well as interactive power loss chart in **REDEXPERT**



### EMC Filter Design Support

- Solution for conducted & radiated emissions
- Tested filter configurations for EN55032 / CISPR-32 class B compliance
- Real EMI behavior shown as well as gain and phase response of EMI filter in **REDEXPERT**



### Crossing Service

- Industrial standard package and pin configuration
- PIN to PIN replacement



For more Design-In Support contact us directly via our contact formular!

