

Time-saving embedded tools

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IPD Click - TPD2017





PID: MIKROE-6075

IPD Click is a compact add-on board for controlling inductive and resistive loads in industrial automation and other demanding applications. This board features the <u>TPD2017FN</u>, an 8-channel low-side switch with MOSFET outputs from <u>Toshiba Semiconductor</u>. This component is directly compatible with CMOS and TTL logic, making it ideal for driving motors, lamps, and industrial programmable logic controllers. It has protection against overcurrent and overheating, ensuring system stability and safety under various operating conditions, supports loads up to 50mH with a current capacity of 0.5A per channel, and accepts an external power supply ranging from 8-24V. It offers flexible integration options with inputs for direct output control, load decoupling diodes, and pre-configured jumpers for easy setup. This Click board[™] is the perfect solution for developers seeking reliable load management in factory automation, industrial control systems, and similar applications.

IPD Click is fully compatible with the mikroBUS[™] socket and can be used on any host system supporting the <u>mikroBUS[™]</u> standard. It comes with the <u>mikroSDK</u> open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this <u>Click board[™]</u> apart is the groundbreaking <u>ClickID</u> feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



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Specifications

Туре	Relay
Applications	Ideal for developing wearable technology, smart home devices, robotics, and AR/VR applications
On-board modules	TPD2017FN - 8-channel low-side load switch featuring MOSFET outputs from Toshiba Semiconductor
Key Features	Low-side load switch, CMOS/TTL logic control, protection features, suitable for inductive and resistive loads, inductive load of 50mH max, 0.5A output current per channel, can drive load directly, high-voltage operation, and more
Interface	GPIO
ClickID	Yes
Compatibility	mikroBUS™
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V,External

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click Boards[™]

Downloads

CRS20I40A datasheet

IPD Click - TPD2017 example on Libstock

TPD2017FN datasheet

IPD Click - TPD2017 2D and 3D files

IPD Click - TPD2017 schematic

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