DEVLAB



PY32F003L24D6TR DevLab Development Board

v1.0

2025-09-24 Rev. A

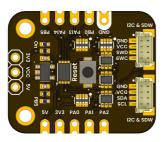
Professional electronic component

PRODUCT OVERVIEW

Professional electronic module designed for reliable performance and easy integration with modern development platforms.

PRODUCT VIEWS

TOP VIEW



Component placement and connectors

BOTTOM VIEW



Underside components and connections

KEY TECHNICAL SPECIFICATIONS



CONNECTIVITY

Primary Interface: **GPIO (Interrupt)**

Logic Levels: VCC (2V - 5.5V tolerant)

Matrix 5x5: GPIO-8

KEY FEATURES

NeoPixel 5x5 Matrix ATMEGA328P

microcontroller (8-bit AVR) for visual feedback

QWIIC Connector USB-C Power Input

for I2C peripherals (5V)

Breadboard Friendly Compact Size Standard 0.1" pin spacing 40mm x 40mm

Wide Supply Range

2.0 V to 5.5 V,

ADDITIONAL TECHNICAL INFORMATION



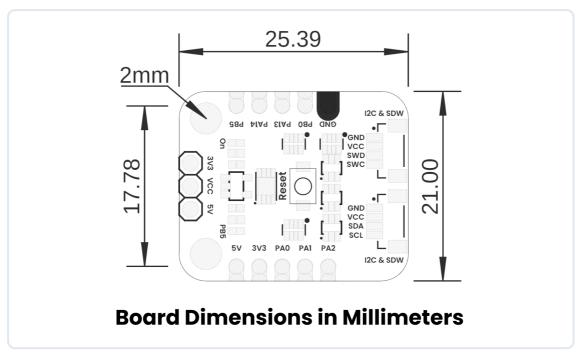
FEATURE DESCRIPTION

Microcontroller PY32F003L24D6TR (32-bit ARM Cortex-M0)

Memory 24KB Flash, 4KB SRAM

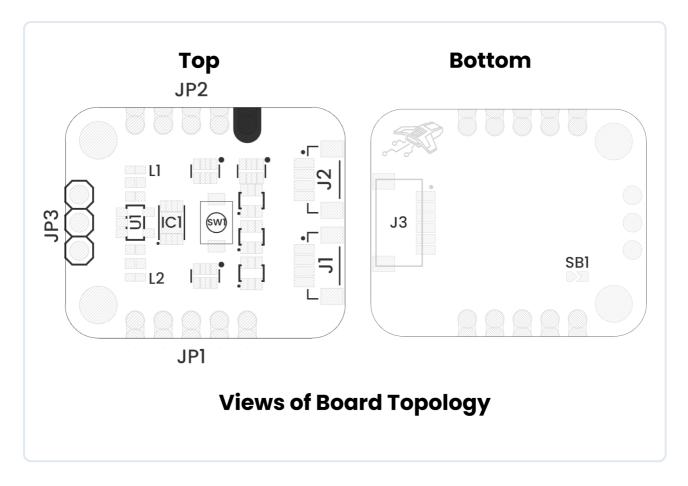
HARDWARE DOCUMENTATION

MECHANICAL DIMENSIONS



Physical dimensions and mounting specifications (measurements in millimeters)

SYSTEM TOPOLOGY



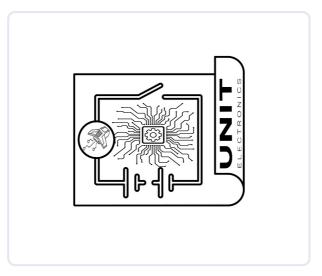
Connection topology and system integration diagram

Click image to open in full size

COMPONENT REFERENCE

REF.	DESCRIPTION
IC1	PY32f003L24D6TR Microcontroller
U1	AP2112K 3.3V Regulator
SW1	Reset Push Button
L1	Power On LED
L2	Built In LED to PB5
J1	JST 1mm Connector for I2C or JTAG
J2	JST 1mm Connector for I2C or JTAG
J3	JST 1mm Connector for SPI
JP1	Header for GPIOs
JP2	Header for GPIOs
JP3	Header for Power Supply Selection
SB1	Solder Bridge to Enable LED Built In

CIRCUIT SCHEMATIC



Complete circuit schematic showing all component connections

View Complete Schematic PDF

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