



Tuya T5-AI Development Board

Board Pinout

REV: V102

| Pin Multiplexing | | | | | | | |
|------------------|-----|---------|---------|-----|-----|----------|--------|
| I/O | S1 | DL UART | TF Card | I/O | S1 | LOG UART | IO-LED |
| P10 | ON | ON | OFF | P01 | ON | ON | OFF |
| | OFF | OFF | ON | | OFF | OFF | ON |
| P11 | ON | ON | OFF | P00 | ON | ON | - |
| | OFF | OFF | ON | | OFF | OFF | - |

USB Type-C Power 5V Only

Dual Channel Serial (CH342F)

- CH1: Serial Flash Download (P10/P11)
- CH2: Serial Debug (P0/P1)

Module: T5-E1-IPEX

- ARMv8-M Star (M33F) @480MHz
- 16KB ITCM and 16KB DTCM
- 8 MB SiP flash memory
- 16 MB SiP PSRAM
- 640 KB shared SRAM

Audio: 2CH ADC, 1CH DAC

I/O connectors:

- 56x GPIOs
- configurable peripherals
- 2x SPI
- 2x QSPI
- 3x UART
- 2x I2C
- 1x SDIO
- 1x CAN
- 12x PWM
- 3x I2S

Display+ Camera (*Optional Stack Module):

- 3.5" TFT: ILI9488 320(RGB)*480
- Cap Touch: GT11510M
- Camera: OVX4388 1600*1200
- Pin Occupancy
- (P10) Connector - DVP Camera
- (P8/P9) Connector - 3.5" RGB Screen + Touch

TF-Card

| TF-Card | T5 GPIO |
|---------|---------|
| D3 | P11 |
| D2 | P10 |
| D1 | P5 |
| D0 | P4 |
| CMD | P3 |
| CLK | P2 |
| CD | P8 |

USB Host

