

[illegible]

The schematic diagram illustrates the TVDD power plane connections. It shows a central TVDD line connected to a TVS diode array (U3) and a TVS diode array (U4). The TVS diode array (U3) is connected to the TVDD line at pin 1 and to the TVS diode array (U4) at pin 2. The TVS diode array (U4) is connected to the TVDD line at pin 1 and to the TVS diode array (U3) at pin 2. The TVS diode array (U3) is also connected to the TVS diode array (U4) at pin 2. The TVS diode array (U4) is also connected to the TVS diode array (U3) at pin 2. The TVS diode array (U3) is also connected to the TVS diode array (U4) at pin 2. The TVS diode array (U4) is also connected to the TVS diode array (U3) at pin 2.

The schematic diagram illustrates the pin connections for the STM32L432C-DT microcontroller, organized into eight sections (U1, U2, U5, U7, U8, U10, U12, U14). Each section shows the connection of the microcontroller's pins to the system power supply (3V3_PYLK) and ground (GND), as well as to various signal lines and timing components.

- U1:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, TMS (pin 3) to T_TMS, SWDIO (pin 4) to T_TMS.
- U2:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, TCK (pin 3) to T_TCK, SWCLK (pin 4) to T_TCK.
- U5:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, RTCK (pin 3) to T_RTCK, DTR (pin 4) to T_RTCK.
- U7:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, TDO (pin 3) to T_TDO, SWO (pin 4) to T_TDO.
- U8:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, TRST (pin 3) to T_TRST, RTS (pin 4) to T_TRST.
- U10:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, RESET (pin 3) to T_RESET.
- U12:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, TDI (pin 3) to T_TDI, VCP (pin 4) to T_TDI.
- U14:** VCCA (pin 1) to 3V3_PYLK, VCCB (pin 2) to GND, DIR (pin 5) to TVDD, VCP (pin 3) to T_VCP, RX (pin 4) to T_VCP.

Timing components include resistors R5, R7, R1, and R23, and capacitors C8, C9, C10, C11, C12, C13, C14, and C15. The capacitors are connected to the power supply and ground to provide decoupling and timing control.

The top diagram shows the basic connection of the LM1117F-3.3 voltage regulator. The input is 5V_USB_CHGR, connected to pin 1 (VIN). The output is 3V3_PYLK, connected to pin 2 (VOUT). The ground connection is at pin 3 (GND). The regulator is represented by a box labeled LM1117F-3.3. The input and output capacitors are C4 (10uF) and C5 (100nF) respectively. The output capacitor is C2 (10uF). The ground connection is labeled GND.

The middle diagram shows the connection of the LM1117F-3.3 voltage regulator. The input is 3V3_PYLK, connected to pin 1 (VIN). The output is 3V3_USB_PYLK, connected to pin 2 (VOUT). The ground connection is at pin 3 (GND). The regulator is represented by a box labeled MT19700. The input and output capacitors are R24 (4.7K) and R25 (16K) respectively. The output capacitor is C7 (10uF). The ground connection is labeled GND.

The bottom diagram shows the connection of the LM1117F-3.3 voltage regulator. The input is 5V_USB_CHGR, connected to pin 1 (VIN). The output is 5V_OUT_EN, connected to pin 2 (VOUT). The ground connection is at pin 3 (GND). The regulator is represented by a box labeled MT19700. The input and output capacitors are R29 (4.7K) and R30 (16K) respectively. The output capacitor is C16 (10uF). The ground connection is labeled GND.


[illegible]

1 PYLK_BOOT0
2 SWD_SDA — 3V3_PYLK
3
4 SWD_SCK — GND
5

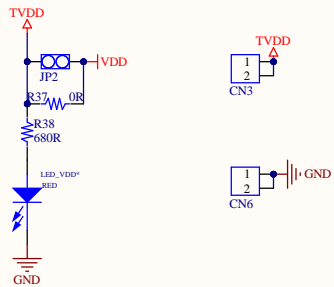
CN2

Diagram illustrating the TVDD pin configuration:

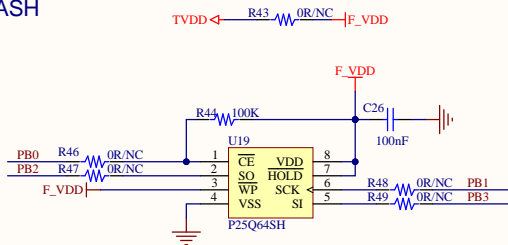
- Pin 1 is connected to 3V3_USB_PYLK.
- Pin 2 is connected to TVDD* through resistor R34.
- Pin 3 is connected to 5V_USB_PYLK.
- The TVDD* pin is connected to TVDD through a diode OR.

Title: PY32F403C1xT_LINK.SchDoc		
Project: PY32L090R2xT_START.PrjPcb		
Size: A3	Date: 2025/7/4	
Sheet: 1 of 2	Revision: V2.0	

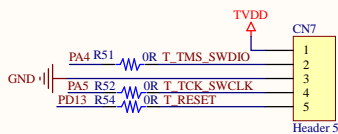
VDD_Selection



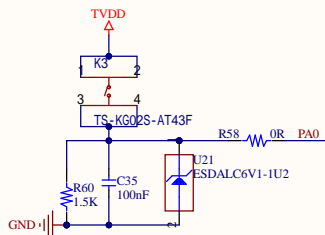
FLASH



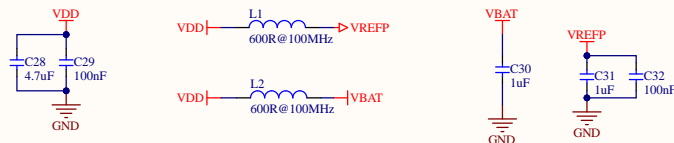
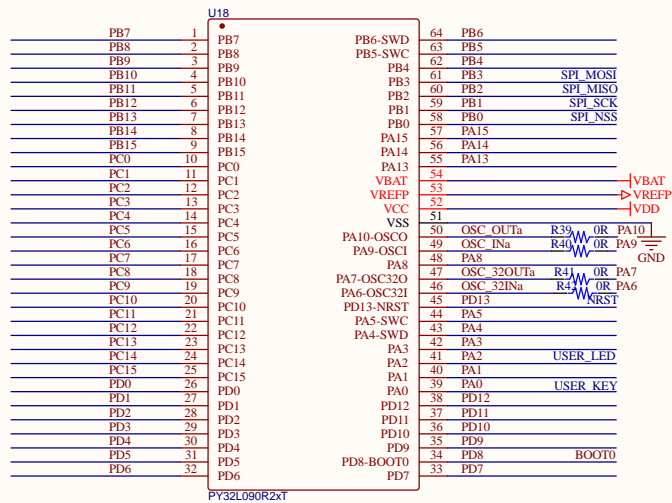
Debug Connector



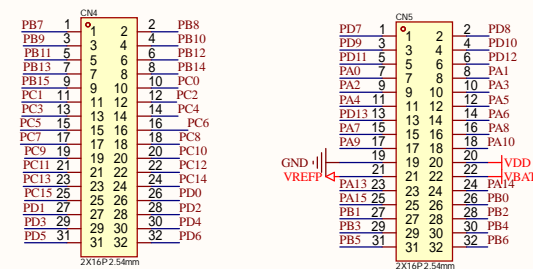
Key



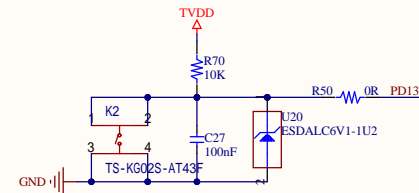
MCU



Extension PIN



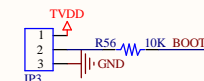
NRST



Led



Boot_Selection



T_TRST_VCP_RTS	<<T_TRST_VCP_RTS
T_RTCK_VCP_DTR	<<T_RTCK_VCP_DTR
T_TDL_VCP_TX	<<T_TDL_VCP_TX
T_VCP_RX	<<T_VCP_RX
T_TDO_SWO	<<T_TDO_SWO
T_RESET	<<T_RESET
T_TCK_SWCLK	<<T_TCK_SWCLK
T_TMS_SWDIO	<<T_TMS_SWDIO

OSC

