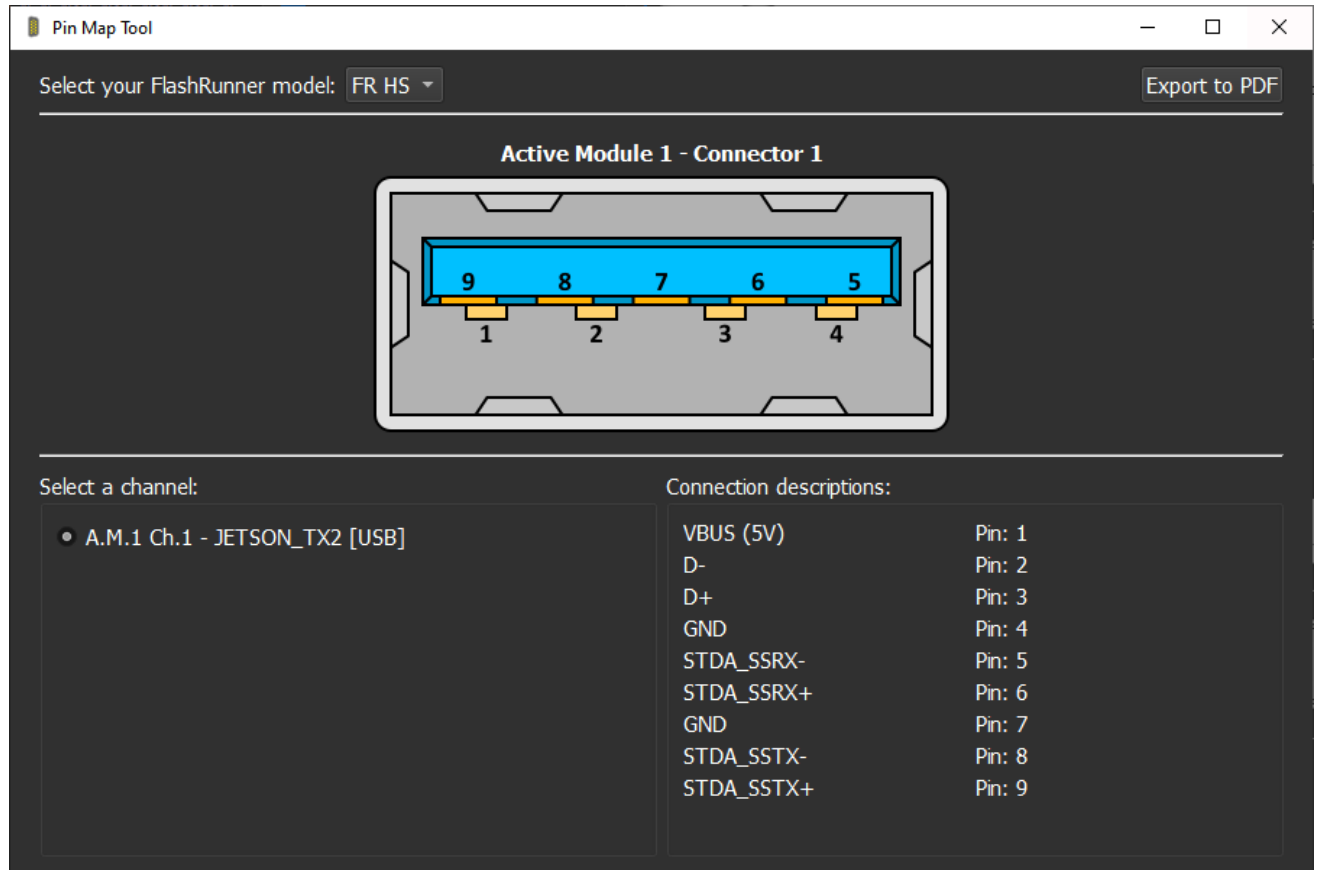


Interfacing FlashRunner HS with NVIDIA JETSON TX2

Supported Protocols

#TCSETPAR CMODE <USB>



Commands

CONNECT

Syntax	#TPCMD CONNECT
Description	Connects to the device in RCM mode. Validates USB Vendor ID and Product ID, reads interface information and the device Universal ID (UID). If the device has already exited RCM mode, an error is returned and the board must be power-cycled.

RCM_FLASH

Syntax	#TPCMD RCM_FLASH
Description	Sends the FRB image to the device via the RCM protocol. Used to upload bootloader images during the first phase of the flashing sequence.

NV3_FLASH

Syntax	#TPCMD NV3_FLASH <imgType>
Description	Transfers a boot or recovery image to the device via the NV3 protocol.
Parameters	<imgType> – Image type string required by the device. Refer to the project file for the exact value associated with each FRB (e.g. bct_bootrom, bct_mb1, blob).

ACQUIRE_NV3

Syntax	#TPCMD ACQUIRE_NV3
Description	Waits for the device to re-enumerate and acquires the NV3 interface. Must be called after a successful RCM_FLASH sequence, before any NV3 command.

NV3_BOOT

Syntax	#TPCMD NV3_BOOT <bootMode> [ACQUIRE_INTERFACE]
Description	Sends a boot command to the device via NV3. If ACQUIRE_INTERFACE is specified, the command also waits for USB re-enumeration and re-acquires the NV3 interface, leaving the session ready for the next command.
Parameters	<bootMode> – RECOVERY COLDBOOT. See Chapter 4.
	[ACQUIRE_INTERFACE] – Optional. If present, waits for re-enumeration and acquires the new NV3 interface.

NV3_REBOOT

Syntax	#TPCMD NV3_REBOOT <bootMode> [ACQUIRE_INTERFACE]
Description	Sends a reboot command to the device via NV3. Behaviour and parameters are identical to NV3_BOOT.
Parameters	<bootMode> – RECOVERY COLDBOOT.
	[ACQUIRE_INTERFACE] – Optional. If present, waits for re-enumeration and acquires the new NV3 interface.

ERASE_PARTITION

Syntax	#TPCMD ERASE_PARTITION <instance> <deviceType> [<partitionName>]
Description	Erases a named partition or the entire device type on the specified memory instance. If partitionName is omitted, the full device type is erased.
Parameters	<instance> – EMMC SPI
	<deviceType> – SDMMC_BOOT SDMMC_USER
	[<partitionName>] – Optional. Specific partition to erase

WRITE_PARTITION

Syntax	#TPCMD WRITE_PARTITION <instance> <deviceType> <partitionName> [<fileLengthInBytes>]
Description	Writes the FRB content to a named partition on the specified memory instance. The file size is determined automatically unless explicitly provided. For large sparse images (e.g. the APP partition) the size must be provided explicitly.
Parameters	<instance> – EMMC SPI
	<deviceType> – SDMMC_BOOT SDMMC_USER
	<partitionName> – Target partition name (e.g. BCT, MB1_BCT, APP, UDA, kernel, kernel-dtb).
	[<fileLengthInBytes>] – Optional. Explicit file size in bytes. Highly recommended for images > 20MB.

DISCONNECT

Syntax	#TPCMD DISCONNECT
Description	Disconnects from the device and releases all USB resources. Must be the last command in the project sequence.