

PY32F002B 使用 J-Link 开发示例

一、硬件搭建

1. 硬件准备

硬件	规格/数量/路径
PC	Windows
J-link	*1
Start Kit	*1
Start Kit 原理图	PY32F002B 资料-20230403\Start
	Kit\PY32F002B StartKit V1.0

2. J-Link 接线图





二、软件安装

1. 软件准备

软件/资料	版本/路径
Keil uVison5	
Puya. PY32F0xx_DFP. 0. 0. 4	PY32F002B 资料-20230403\pack\MDK
PY-MCU 资料	

2.Keil uVison5 默认安装

older Selection Select the folder where SETUP will install files.	arm KEIL
Press 'Next' to install MDK-ARM to these folders. Press 'Browse'	to select different folders for installation.
- Destination Folders	
Core: C:\Keil_v5	Browse
Pack: C:\Users\zouyi\AppData\Local\Arm\Packs	Browse
Update Installation: Create backup tool folder	
✓ Backup old core files to C:\Kei_v5\Backup.001	

3. Pack 默认安装

rack onzip. Puya Prozi oxx_DTP 0.0.4	>
Welcome to Keil Pack Unzip	
Release 2/2022	
This program installs the Software Pack:	
Puya PY32F0xx_DFP 0.0.4	
Puya PY32F0 Series Device Support	
Destination Folder	
Destination Folder C:\Users\zouyi\AppData\Local\Arm\Packs\Puya\PY32F0xx_DFP\	0.0.4
Destination Folder C:\Users\zouyi\AppData\Local\Arm\Packs\Puya\PY32F0xx_DFP\ Keil Pack Unzip	0.0.4
Destination Folder C:\Users\zouyi\AppData\Local\Arm\Packs\Puya\PY32F0xx_DFP\ Keil Pack Unzip Pack already installed. << Ba	0.0.4



4. 安装完成重启电脑;

5. 接入 J-Link 后, 查看设备管理器是否安装好驱动; 如果驱动异常,可以在 Keil 安装目录中安装,以下截图以 64 位系统为例

名称	修改日期	类型	大小	
amd64	2022/4/15 7:12	文件夹		
x86	2022/4/15 7:12	文件夹		
¢dpinst_x64	2021/2/4 16:00	应用程序	1,022 KB	
JLink	文件说明: Driver Package Installer	安全目录	13 KB	
] JLink	公司: Microsoft Corporation 文件版本: 2.1.0.0	安装信息	15 KB	
JLinkCDC	创建日期: 2021/2/4 16:00 大小: 0.99 MB	安全目录	19 KB	
JLinkCDC	2021/2/4 16:00	安装信息	842 KB	
JLinkCDC.sys	2021/2/4 16:00	系统文件	111 KB	
JLinkWinUSB	2021/2/4 16:00	安全目录	15 KB	
JLinkWinUSB	2021/2/4 16:00	安装信息	9 KB	
JLinkx64.sys	2021/2/4 16:00	系统文件	70 KB	
WdfCoInstaller01011.dll	2021/2/4 16:00	应用程序扩展	1,764 KB	

6. 打开 PY-MCU 资料中的例程

PY-MCU 资料 -20220413\PY32F002B 资料-20230403\Library and Examples\PY32F002B_Firmware_V0.0.1\Projects\PY32F002B-STK\Example_LL\GPI0\GPI0_ Togg1e\MDK-ARM

```
7. 编译工程
```



uild Time Elapsed: 00:00:01



8. 配置 Options, Debug 为 J-link

🖬 🐸 🔹 🔜 🛛 🐺 Target 1	A B 🗢 💎 📾	
4 🖬 📄 ma	in 🔣 Options for Target 'Target 1'	>
Project:	Bevice Target Output Listing Use C/C++ C Use §mulator with restrictions Settings Image: Limit Speed to Real-Time Image: Limit Speed to Real-Time Image: Limit Speed to Real-Time Image: Limit Speed to Real-Time Image: Limit Speed to Real-Time Image: Run to main() Initialization File: Image: Limit Speed to Real-Time Image: Limit Speed to Real-Time Restore Debug Session Settings Image: Limit Speed to Real-Time Image: Limit Speed to Real-Time Restore Debug Session Settings Image: Toolbox Image: Limit Speed to Real-Time Image: Watch Windows & Performance Analyzer Image: System Viewer CPU DLL: Parameter: SARMCM3.DLL: Parameter: Dalalog DLL: Parameter: DARMCM1.DLL: PCM0+ Image: Warn if outdated Executable is loaded Manage Component V	Ase Linker Debug Vtilities
a spooks 13 Punc 0., temp	OK C	ancel Defaults Help

9. 点击 Setting,可能有以下弹框,点击 OK



10. 在新的弹框中选择 M0+

	· · · ·		Little e	ndian 💌	Core #0
Manufacturer	Device	Core	NumCores	Flash size	RAM size
Inspecified	ARM7	ARM7	1		
Inspecified	ARM9	ARM9	1	+	
Inspecified	ABM11	ARM11	1		
Inspecified	Cortex-A5	Cortex-A5	1	-	-
Jnspecified	Cortex-A7	Cortex-A7	1	-	
Inspecified	Cortex-A8	Cortex-A8	1		
Inspecified	Cortex-A9	Cortex-A9	1		
Inspecified	Cortex-A12	Cortex-A12	1	-	
Inspecified	Cortex-A15	Cortex-A15	1	-	-
Inspecified	Cortex-A17	Cortex-A17	1		
Inspecified	Cortex-Mv8_Baseline	Cortex-M ARMv8	1		
Inspecified	Cortex-Mv8_Mainline	Cortex-M ARMv8	1		
Inspecified	Cortex-M0	Cortex-M0	1		
Inspecified	Cortex-M0+	Cortex-M0	1		
Inspecified	Cortex-M1	Cortex-M1	1	-	
Inspecified	Cortex-M3	Cortex-M3	1	•)	
Inspecified	Cortex-M4	Cortex-M4	1		
Inspecified	Cortex-M7	Cortex-M7	1		
Inspecified	Cortex-R4	Cortex-R4	1		



11. 调试方式选择 SWD, 成功后会显示芯片的 IDCODE

	mace Adapter		SW Devic	e			
SN:	20121126	-	_	IDCODE	Device Name		Move
Device:	J-Link A	ARM	SWDI	⊙ 0x0BC11477	ARM CoreSigh	nt SW-DP	Up
HW:	V8.00 dll	: V7.22b	_				Dawn
FW: J	-Link ARM V8	compiled No		1			
Port		Max	G Auto	matic Detection	ID COD	E:	
sw	- 50	00 kHz -	C Man	ual Configuration	Device Nam	01	
				1 1	1		
		Auto Clk	Add	Delete U	pdate IR le	ni	
Connect Connect	Normal	Reset: No	ormal		Cache <u>C</u> ode Cache <u>M</u> emory	I ⊻erify Coo I Download	de Download I to <u>E</u> lash
Interface		TCP/IP				M	lisc
· USB	C TCP/IP	Network S	Settings			· · · · 1	
	1	IP-Addres	4	Port (Auto: Aut	odetect	JLink Into
	Scan	127 .	0.0	. 1 :	0	Pina	JLink Cmd
-							
	Scan	127 .	0.0	. 1 :	Auto: Aut	Ping	JLink Info

12. 点击 Download 按钮即可下载程序到板子

