Quick Start Guide

MCBSTM32E





Install Keil MDK Version 5

• Download and install the MDK Core from www.keil.com/mdk5/install

Add Software Pack using the Pack Installer

• **Keil::STM32FIxx_DFP** – STMicroelectronics STM32FI Series Device Support

Power up the board

- Connect a USB power supply to the **Power** receptacle
- Connect the board to the PC using the **Trace Connector** and a debug adapter, for example ULINK*pro*

Verify Installation using example projects provided in the Software Pack

• Copy an example using the Pack Installer. Compile, download to Flash, and debug the application. The provided examples are ready to run. Trace settings might have to be adapted.

More Information

- Evaluation Board Description
- MCBSTM32E User's Guide

Related Information

- MDK Version 5
- MDK-Professional Middleware
- Learning Platform

www.keil.com/boards2/keil/mcbstm32e www.keil.com/support/man/docs/mcbstm32e

www.keil.com/mdk5 www.keil.com/mdk5/middleware www.keil.com/mdk5/learn



ULINKpro Debug and Trace Adapter

Connect ULINK*pro* to the board's **Trace** connector and choose **ULINK Pro Cortex Debugger**.

Options for Target 'STM32F103 Flash'	×
Device Target Output Listing User C/C++ Asm C Use Simulator with restrictions Settings	Linker Debug Utilities
✓ Limit Speed to Real-Time ✓ Load Application at Startup ✓ Run to main() Initialization File:	✓ Load Application at Startup ✓ Run to main() Initialization File:
Edit	Edit

Cortex-M Target Driver Setup		
Debug Trace Flash Download Pack		
ULINK USB - JTAG/SW Adapter		
Serial No: Any		
ULINK Version: ULINKpro	51	
Device Family: Cortex-M		
Firmware Version: V1.57		
SWJ Port: SW	1	
Max Clock: 10MHz 💌		

Click **Settings** and configure the **Debug** connection for Serial Wire Debug (SWD) by selecting the Port **SW**.

Trace Settings

Configure trace by selecting the **Trace** tab and enter the correct CPU **Core Clock** speed as specified in your project. Check the **Trace Enable** box.

For complete instruction trace, select **Sync Trace Port with 4-bit data** and enable **ETM Trace Enable**.

Cortex-M Target Driver Setup			
Debug Trace Flash Download Pack			
Core Clock: 72.000000 MHz	☑ Trace Enable □ Unlimited Trace	ETM Trace Enable	
Trace Port Sync Trace Port with 4-bit Data CLK: 0.0 ns D1: 0.0 ns D2: 0.0 ns D3: 0.0 ns	Timestamps Image: Enable Prescaler: PC Sampling Prescaler: 1024*16 ▼ Image: P	Trace Events CPI: Cycles per Instruction EXC: Exception overhead SLEEP: Sleep Cycles LSU: Load Store Unit Cycles FOLD: Folded Instructions EXCTRC: Exception Tracing	
ITM Stimulus Ports 31 Port 24 23 Port 16 15 Port 8 7 Port 0 Enable: 0x80000001 Image: 0x0000008 Port 16 15 Port 8 7 Port 0 Privilege: 0x00000008 Port 3124 Image: Port 158 Port 70 Image:			
	OK Cancel	Help	

More Information

• Getting Started User's Guide

www.keil.com/gsg