

STM32H7B3 Discovery Kit

High-performance 32-bit MCU

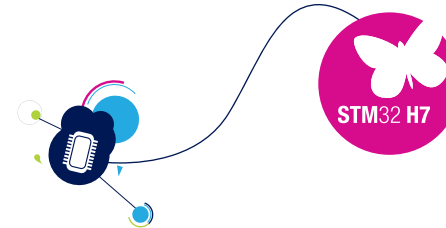
DISCOVERY BOARD FEATURES

• STM32H7B3LI MCU features

- STM32H7B3LIH6Q with **280 MHz / 600 DMIPS** Arm® Cortex®-M7 core
- 2-Mbyte dual-bank embedded Flash
- 1.4-Mbyte embedded RAM
- Chrom-ART Accelerator™

- 512-Mbit Octo-SPI NOR Flash memory
- 128-Mbit SDRAM
- 4.3" TFT LCD display, RGB, 480x272 pixels, capacitive Touch Panel.
- Wireless connectivity: Wi-Fi® (802.11 b/g/n compliant).

- Audio CODEC
- Connectors: STMod+, MEMS digital microphone, FD-CAN, camera interface, audio jacks (IN/OUT), EXT I2C, microSD Card, ARDUINO® Uno V3, USB OTG HS micro-AB.
- On-board STLINK-V3E in-circuit debugger/programmer



STM32H7B3I-DK ARDUINO® Uno Rev 3 connectors

CN19	
5V_VIN	1 E5V
3V3	2 IOREF
NRST	3 RESET
3V3	4 3V3
5V	5 5V
GND	6 GND
GND	7 GND
VIN	8 VIN

PA4	1 A0
PC4	2 A1
PA0_C	3 A2
PA1_C	4 A3
PC2_C/PD13	5 A4
PC3_C/PD12	6 A5

■ ARDUINO® Uno

CN10	
SCL/D15	10 PD12
SDA/D14	9 PD13
AVDD	8 3V3_VREFP
GND	7 GND
SCK/D13	6 PA12
MISO/D12	5 PB14
PWM/MOSI/D11	4 PB15
PWM/CS/D10	3 PI0
PWM/D9	2 PI7
D8	1 PF10

D7	8 PI10
PWM/D6	7 PH10
PWM/D5	6 PH11
D4	5 PE2
PWM/D3	4 PH9
D2	3 PI9
TX/D1	2 PH13
RX/D0	1 PH14

CN11

■ Discovery board signal

By using or installing (as applicable) this evaluation kit you accept all the terms of the EVALUATION PRODUCT LICENCE AGREEMENT available at www.st.com/epl

FAN-OUT EXPANSION BOARD

- Wi-Fi®, Grove and mikroBUS™ compatible connectors
- Space provided for headers for use with breadboards

STM32H7 Discovery kit for STM32H7B3 MCUs

GETTING STARTED

- 1/ Ensure that jumper JP1 is set to STLK.
- 2/ Connect a Type-A to Micro-B USB cable from the STM32H7B3I Discovery board (connector USB STLINK CN14) to a PC to power the board. Then LEDs LD5 (+5V) and LD4 (STLINK COM) will light up.
- 3/ Take advantage of three graphical stacks running on the same board with many featured applications for each selected Sub-Demo:
 - Menu launcher
 - Audio player TGFx application (MP3 support)
 - Clock and Weather with Alarm feature
 - Video player TGFx application (Audio enabled)
 - TGFx Graphic demo: Effects and accelerator
 - STemWin Graphic demo
 - EWZ Graphic demo
- 4/ The demo application software as well as other software examples and applications for exploring STM32H7 features are available at www.st.com/en/product/stm32h7b3i-dk

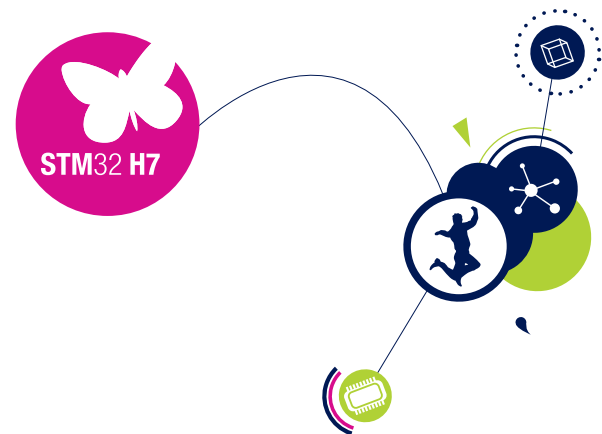
SYSTEM REQUIREMENTS

- Windows® OS (7, 8 and 10), Linux® 64-bit or macOS®
- USB Type-A to Micro-B cable

DEVELOPMENT TOOLCHAINS

- Keil® MDK-ARM1
- IAR™ EWARM1
- GCC-based IDEs

1. On Windows® only



EMBEDDED SOFTWARE

STM32CubeH7 MCU Package featuring embedded software solution featuring drivers, RTOS, file system, USB, graphics and examples for this board.



This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.
Contains module from Inventek Systems:
- model: ISM43340-M4G-L44-10CF FCC ID: 07P-341 IC: 10147A-341



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