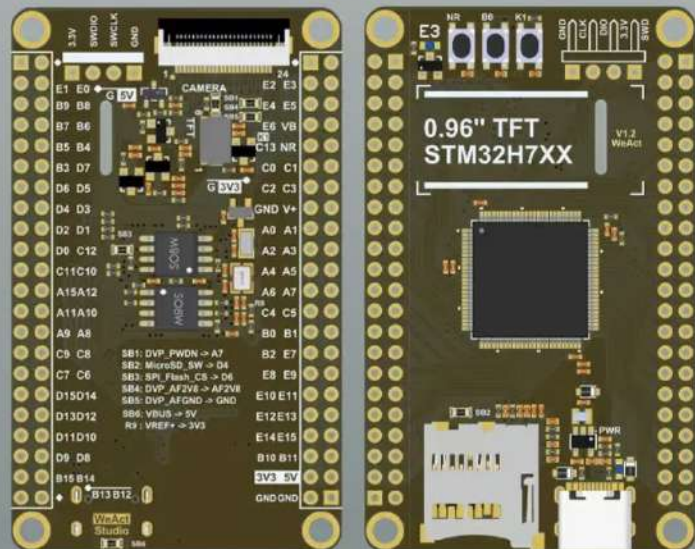


**WeAct
Studio**

550Mhz Max
Cortex-M7 Core Board

STM32H723VGT6

RAM:564KB,ROM:1024KB
8MB SPI Flash,8MB OSPI Flash



STM32H723VGT6

High-performance and DSP with DP-FPU, Arm Cortex-M7 MCU with 1 MByte Flash, 564 Kbytes RAM, 550 MHz CPU, L1 cache, external memory interface, subset of peripherals

System

LDO, USB and
backup regulators
POR/PDR/PVD/BOR

Multi-power domains

Xtal oscillators
32 kHz + 4 ~48 MHz

Internal RC oscillators
32 kHz + 4, 48 & 64 MHz

3x PLL

Clock control

RTC/AWU

1x SysTick timer

2x watchdogs
(independent and
window)

80/112/114 I/Os

Cyclic redundancy
check (CRC)

Unique ID

Digital temperature sensor

Chrom-ART Accelerator™

Cache I/D 32+32 Kbytes

Arm®
Cortex® -M7
550 MHz

1-Mbyte single-bank
Flash memory

RAM 560KB incl.
256KB ITCM

FMC/SRAM/NOR/NAND/
SDRAM

2x Octo-SPI

1024-bit + 4-Kbyte
backup SRAM

Connectivity

TFT LCD controller

HDMI-CEC

6x SPI, 4x I²S, 5x I²C

Camera interface, PSSI

Ethernet MAC 10/100
with IEEE 1588

MDIO slave

3x FDCAN
(Flexible Data rate)

1x USB 2.0 OTG FS/HS

2x SDMMC

5x USART + 5 UART
LIN, smartcard, IrDA,
modem control

1x Low-power UART

2x SAI
(Serial audio interface)

SPDIF input x4

DFSDM (8 inputs/4 filters)

SWP
(Single Wire Protocol)

Control

2x 16-bit motor control
PWM synchronized
AC timer

10x 16-bit timers
4x 32-bit timers

5x Low-power timer

Floating point unit
(DP-FPU)

Nested vector
interrupt
controller (NVIC)

JTAG/SW debug/ETM

Memory Protection Unit
(MPU)

ROP, PC-ROP
anti-tamper

AXI and Multi-AHB
bus matrix

4x DMA

True random number
generator (RNG)

Analog

2x 12-bit, 2-channel DACs

2 x 16-bit ADC
(up to 3.6 MSPS)
18 channels

1 x 12-bit ADC
(up to 5 MSPS)
12 channels

2x COMP

2x OpAmp