

Compare ST and NXP ARM Cortex-M4 microcontrollers

	LPC4357	STM32F407IG
core	cortex-M4	cortex-M4
Flash	1024 KB	1024 KB
RAM	136 KB	192+4 KB
Freq	204 MHz	168 MHz
price(digikey.com)2013/2/2	15.84 \$	15.08 \$
package	256LBGA	176UFBGA
EEPROM (KB)	16	-
static memory controller	RAM, ROM, and NOR flash	Compact Flash, SRAM, PSRAM, NOR and NAND
memories		
Flash retention time	10 years *	30 years Maximum
Flash erase/program	10,000 times**	10,000 times
Standard Timers	5	12*(16bit) + 2*(32bit)
PWM channels	(6 channel formotor control)	all timers, 2 timer(6 channel for motor control)
Temperature sensor	-	●
Ethernet(10/100)	●	●
parallel camera interface	0	1
USB	2 high-speed	2 (1 full-speed + 1 high-speed)
USART	3	4
UART	1	2
I2C	2	3
CAN	2	2
SPI+I2S	5	3
ADC	8*(10 bit, 0.4 MSPS)	24*(12bit, 2.4 MSPS)
DAC	1*(10bit)	2*(12bit)
LCD controller	●	●
SD/MMC	●	●
I/O pins	164	140
watchdog timers	1	2
RTC	●	●
backup battery	●	●
Internal RC OSC	12MHz	16 MHz + internal 32KHz for RTC
temp range	-40°C ~ 85°C	-40°C ~ 85°C
power supply	2.2 to 3.6 V	1.8 to 3.6 V

* {for some other nxp family 30 years}

** {for some other nxp family 100,000}