CP324BSS24 Features

CPU Core

32-bit CPU,the highest frequency is 160MHz

Maximum 16KB 4Way ICache, configurable part Way as a common memory for the CPU use or other Peripheral

Memory

On-chip 32KB SRAM(not including ICache)

ICache SRAM: 4KB~12KB configurable

Clock Source

RC Clock frequency about 16MHz

LRC(low power RC) clock frequency about 32KHz

HTC(low drift internal high frequency RC)clock frequency is 5MHz

Digital I/O

16 programmable digital I/O pins

USB DP/DM can be configured to normal I/O pins

General the IO supports pull-up(10k),pull-down(60k), strong,weak output,input and high impedance

Up to 8 external interrupt/wake-up source(low power available,can be multiplexed to any I/O, with hardware filter)

Input channel and Output channel, provide arbitrary IO input and output options for some modules

Digital peripherals

One Full Speed USB 1.1 PHY

Two UART Controllers(UART0/1)

UART1 supports DMA and Flow Control

Two SPI Controllers with DMA(SPI0/1) support master mode and slave mode.

One Spi Flash Controller to run code

One SD host controller

I2S audio interface

Two 16-bit Asynchronous Divider Timers

One IIC Controller

Four channel PWM output

0.5 watt Class-D audio amplifier output

Infrared remote control decoder

Watchdog

64-bit EFUSE

Analog Peripherals

MIC amplifier circuit

Two analog audio input channels

10-bit high precision ADC

16-bit high precision ADC (mainly as recording)

16-bit high precision DAC

Low voltage protection

Power on reset

Operating Conditions

Working voltage

VBAT: 2.0v - 5.5v

VDDIO: 2.0v - 3.4v

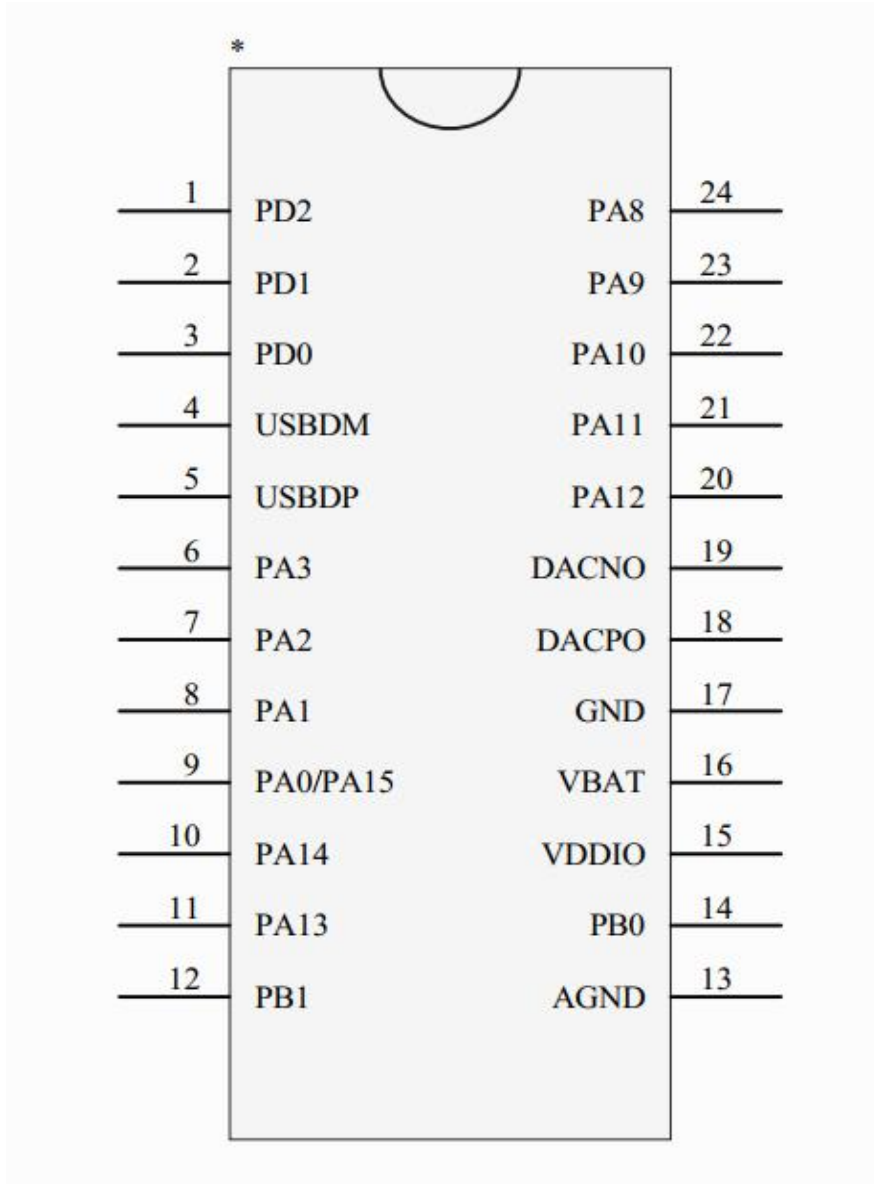Operating Temperature: -40°C to +85°C

Package

QSOP24

Application

Sound Toy

Audio player

1、 Pin Definition

1.1　Pin Assignment

CP324BSS24