

HA5618B Brief

Version 1.00, Jul. 2025

成都华曜芯科技股份有限公司



华曜芯
— CSCT-MICRO —

1 Features

System

- 32-bit high performance CPU with DSP instruction
- Internal 8M bit flash
- Support 26MHz oscillator with on-chip PLL

Bluetooth

- Compliance with Bluetooth5.4, compatible with Bluetooth 5.0/4.2/4.0/2.1 + EDR system
- Max transmitting output power: 9dBm
- Receiver sensitivity: -93dBm@Basic Rate
- Support AVRCP, A2DP, HFP, &HSP profile
- Support SCO/eSCO link
- Bluetooth Dual Mode support: Simultaneous LE and BR / EDR
- LE Data Packet Length Extension
- BQB declaration ID: D068793

FM Tuner

- Support frequency band 87.5~108MHz
- Auto search tuning
- Receive signal strength indicator (RSSI)
- Programmable de-emphasis

Audio Processing

- Support SBC, MP3, WAV, FLAC & APE decode and SBC, MP3, wav-adpcm encode
- Internal packet loss concealment (PLC) for voice processing
- Internal multi-band DRC limiter
- Fully configurable PEQ, up to 12 bands
- Support ALC & ANS for microphone
- Support advanced DSP audio effect
- Support karaoke audio effect: Echo, Reverb, Voice cancellation, Pitch, Howling etc.

Audio Codec

- Two channel 16-bit sigma-delta DACs, One channel 16-bit sigma-delta ADC
- supports sample rate of 8k/ 11.025k/ 12k/ 16k/ 22.05k/ 24k/ 32k/ 44.1k/ 48k
- Stereo PA supports single-end mode or mono differential mode
- Support three AUX inputs
- Support SPDIF RX/TX

Peripherals

- Three 32-bit timers, one watch dog timer
- RTC timer support calendar
- SD card host interface
- USB2.0 FS OTG controller
- IR receiver
- Support QDEC, PWM & breathing LED
- 7 or 8 pin segment LED controller
- Three UARTs up to 3Mbps
- SPI supports master or slave
- I2C supports master or slave
- Programmable GPIO with interrupt input

PMU

- Support Li-Ion battery power supply
- Support power-on key
- Less than 2uA in Power-Off mode
- 16-channel 10-bit SARADC

Package

- QNF32 (4x4)

Temperature

- Operating temperature: -10°C to +70°C

2 Pin Definition

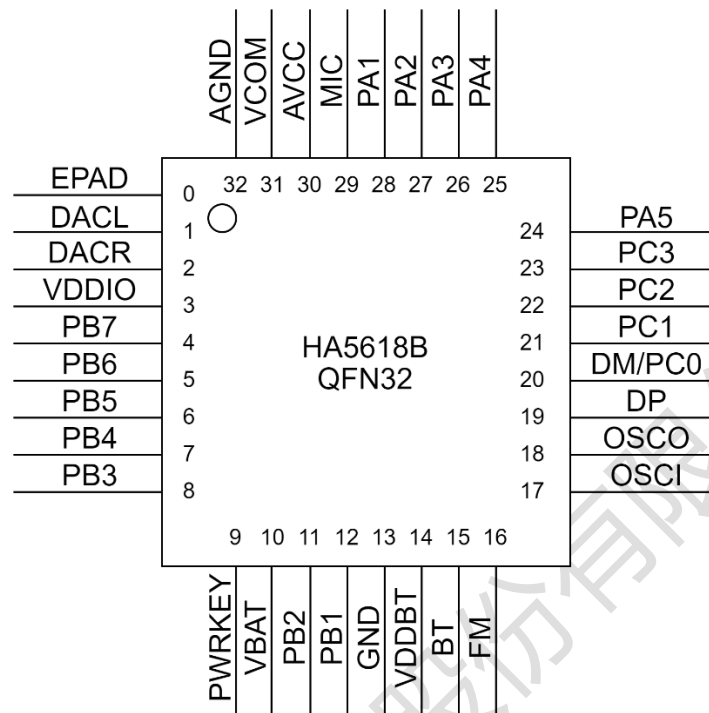


Figure 2-1 HA5618B QFN32 Pin assignment

3 Package Information

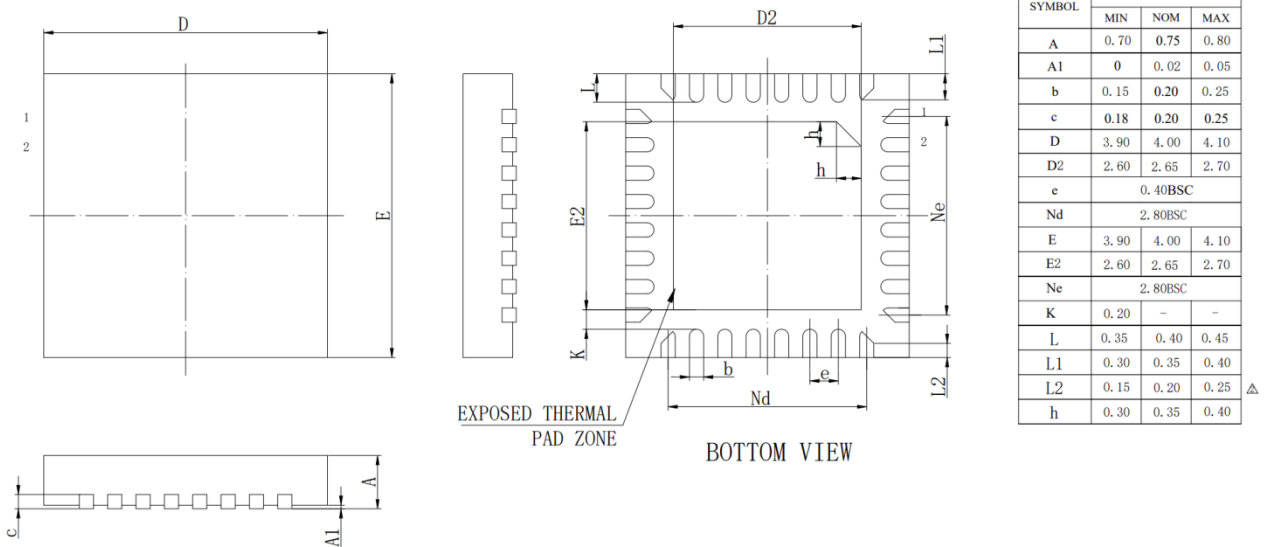


Figure 3-1 HA5618B QFN32 Package



Contact us

Chengdu CSCT-MICRO Technology Co., LTD

Address: Chaotu Chengdu Building, Xinchuan Road, High tech Zone, Chengdu City

E-mail : support@csct-micro.com

Website: www.csct-micro.com

成都华曜芯科技股份有限公司