

Manufacture

• Manufacture • Chips	
Manufacture Name 炬芯科技股份有限公司 Logo  Intro 成立于2014年6月，炬芯科技股份有限公司是中国知名的低功耗消费类系统级芯片设计厂商，为无线音频及智能耳穿戴、智能多媒体、智慧计算及物联网等产品领域提供专业芯片及完整解决方案。 承接炬力集成电路设计有限公司逾20年的技术沉淀及积累，炬芯科技在超低功耗设计、先进半导体工艺及高集成度方面业界知名。公司具备自主研发的超高清多媒体 Website www.actions-semi.com Country china Brand 炬芯	
Chips Core Type 32bit RISC Dimension UART Current Transceiver Compatible Intro Debugging DSP RAM Voice Services Crystal	

no
Power fail

no
Wifi

-
AoA/AoD

Operating Frequency [Max] (MHz)

SSI

Sensor Controller

Receiver Sensitivity

Upgrade Type

Manual
Package Type

-
DSP Technology

General

on chip (PLL)

no
I2S

Chip Name

ATS3505
Flash (kB)

I2C

-
Standby

Output Power

CPU Clock Speed

Pins

DSP Clock Speed

Features

802.15.4 (Zigbee, Thread)
crystal (optional)

no
PDM

LE Audio

Type

蓝牙双模

Bluetooth Version

4.2

I2S

no

Frequency Regulation

CPU Features

Pitch

on-chip RC

no

PWM

Brand

炬芯

SRAM (kB)

Real-Time Clock

no

CPU Architecture

Channels

External clock

no

Protocols

-

RADIO

SAADC

Country

中国

EEPROM (kB)

Crypto Accelerator

Programmable channels

Watchdog timer

no

TWI

no

Bluetooth 5 PHYs

-

SPIM

NFC Tag

SPI

Public Key Hardware Accelerator

Fixed channels

QDEC

-

bluetooth 5.1 support

-

SPIS

CMP

Overview

ATS3505集成了高性能32位RISC CPU、丰富的RAM资源和接口如SD/SDIO/SPI/USB/UART/TWI/PWM/IR/SPDIF RX/I2S TX&RX等。ATS3505支持SEG LED/SEG液晶/点阵液晶/CPU液晶显示，SPI NOR BOOT，外置SPI PSRAM和一个完整的电源管理系统降低BOM成本。

最重要的是ATS3505融合了蓝牙收发器，丰富的基带功能处理器和蓝牙音频配置文件。它支持蓝牙V4.2双模式(BR/EDR)和链接BR/EDR和LE，可以同时激活。

· ATS3505集成了高品质的音频编解码器，可提供高品质的音频体验。

GPIO

Accelerator

Channel groups

PDM

-

Security

TWIM

Features

□Bluetooth V4.2 Dual Mode

□Support all packet types in basic rate and enhanced data rate

□Support SCO/eSCO link

□Support secure simple pairing

□Support low power mode (sniff/sniff sub-rating)

□Bluetooth Piconet and Scatternet support

□Bluetooth TX power: 4dBm(typical)

□Bluetooth RX sensitivity: -86dBm(typical) when packet Type is 2-DH5

CAN

True Random Number Generator

USB

no

TWIS

Block Diagram

CAN FD

Monitor

SPI

no

UARTE

RAM(KB)

Application Note

Human Machine Interface

有

Quad SPI

-

NFCT

Development Board

Security Modules

Debug interface

-

LDO

no

USBD

Datasheet

Timers [Number, bits]

2 × 32-bit 16 MHz

On-chip VBUS

no

QSPI

PWM [Number, bits]

Maximum 9*

Image

Regulated supply for external components

-

ADC [Number, bits]

Price

0.00

DAC [Number, bits]

RMB

□

Supply Voltage [Min to Max] (V)

Rating

no 

Analog comp

no

Ambient Operating Temperature (Min to Max) (°C)

low-power comp

no

Cache

-

Junction Temperature (Min to Max) (°C)

Temperature sensor

no