

Specification

PMU

AIC8800M40B is a power management system chip optimized for 4G, especially based on the Spreadtrum AIC8800M40B system solution. AIC8800M40B integrated 7 DC-DCs and 26 low dropout regulators (LDOs), which are optimized for specific 3G subsystems. All the chipset in the platform power through this chip. Support standby mode with small deep-sleep current.

Baseband

AIC8800M40B is a highly integrated application processor with embedded TD-LTE, LTE FDD, TD-SCDMA/HSPA(+), It consists of Dual-core ARM Cortex TM -A75 processor and Six-core ARM Cortex TM -A55 processor as application processor, which includes a NEON multimedia processing engine, ARM Mali AIC8800M40B as 3D graphics accelerator, multi-standard multi-media accelerators and advanced audio subsystem. The specially optimized architecture of AIC8800M40B can achieve high performance and low power for a lot of applications. Proprietary architectures and algorithms were developed for low power ASIC design and power management. Unique techniques are used for noise suppression/cancellation, echo suppression/cancellation algorithm. Overall, UMS512 chip set presents a high cost-effective platform for six mode Android mobile devices.

The multi-standard video accelerator and an advanced audio subsystem are also included to provide advanced multimedia application and services such as streaming Audio and video, a multitude of decoders and encoders such as H.264 and MPEG-4. Audio supported includes FR, HR, EFR, AMR FR, and AMR HR vocoders, polyphonic ringtones and advanced audio functions such as echo cancellation, hands-free speakerphone operation and noise cancellation.

Operating Frequency Band (RF):

FDD-LTE BAND 2: 1850-1910MHz

FDD-LTE BAND 4: 1710-1755MHz

FDD-LTE BAND 5: 824-849MHz

FDD-LTE BAND 7: 2500-2570MHz

Modulation mode:

QPSK, 16QAM

Maximum of Antenna Gain:

FDD-LTE BAND 2: 2.8dBi

FDD-LTE BAND 4: 2.1dBi

FDD-LTE BAND 5: -0.58dBi

FDD-LTE BAND 7: 2.13dBi

Ratings:

DC 5V charging from adapter