



AX2008 MP3 Decoder SoC



High Performance 32-bit RISC CPU

- 32-bit RISC CPU running at up to 100MIPS
- Fast 64KB on-chip SRAM
- 144KB Mask ROM for MP3 decoder
- 32KB OTP for system booting
- 16 vectored interrupt controller. Two-level programmable priority
- Debug interface connects to GDB via JTAG
- Internal 32-bit ticker-tick timer

LCD Controller

- Support 8080 LCD Interface

Serial Interfaces

- High-speed full-duplex UART with baud rate generator
- Two SPI with double-buffer. Operates up to 24Mb/s
- Dual channel 32-bit IIS for audio codec
- Full-speed USB 2.0 OTG controller with 256-byte FIFO

Other Peripherals

- 34 GPIO pins with configurable pull-up resistors. 8mA driving ability
- SD card interface for SDHC specification 2.0

- 3 16-bit Capture/Compare/Reload timers with PWM
- Watchdog Timer. Clocked from with on-chip RC oscillator
- 4-24MHz Crystal Oscillator
- Phase lock loop for maximum 200 MHz clock generation
- Power-on reset
- Low voltage detector
- On-chip regulator for 3.3V to 1.8V conversion
- Dual channel 16-bit Audio DAC with Class-D AMP

Development and Debugging Support

- GCC compiler toolset
- On-line debugging through IEEE 1149.1 JTAG protocol and GDB

Packages

- 48-pin LQFP

Temperature

- Operating temperature: -40°C to +85°C
- Storage temperature: -65°C to +150°C



AppoTech Limited

Address :Unit 110-111, 1/F, IC Development Centre,
No.6, Science Park West Ave.,
Hong Kong Science Park,
Shatin, N.T., Hong Kong

Telephone :(852) 2607 4090

Fax :(852) 2607 4096

www.appotech.com