

# **F1C100A** *Cost-effective SoC for Multimedia Devices*

# Overview

Allwinner Tech has expanded its multimedia processor lineup to include a new **ARM926EJ-S** chip F1C100A, which is even more competitive for multimedia devices with **cost-effective and lower power consumption**. F1C100A makes multitasking smoother, apps loading more quickly, and anything you touch responds instantly. What's more important, F1C100A is available in **eLQFP128 package with Audio Codec, CVBS input**.

# Block Diagram





### Feature

#### CPU

- ARM926EJ-S
- 16KB D-Cache/ 32KB I-Cache

#### VPU

#### HD Video Decoding

- Up to 1920\*1080@30fps
- Support H.264, H.263, Mpeg1/2/4 etc

HD Video Encoding

- Up to 1280\*720@30fps
- Support MJPEG

#### DPU

- LCD Interfaces: CPU, RGB
- CVBS Input
- CVBS Output
- Support Spread Spectrum Clock

#### Audio

- Audio Codec
- Digital Audio Interface

#### Memory

#### SDR/DDR1

- SDR up to 166MHz clock frequency
- DDR1 up to 200MHz clock frequency

- 16-bit data bus
- Memory capacity up to 64MB
- Support Spread Spectrum Clock

#### Peripherals

- USB2.0 OTG
- SD Card V2.0
  - SPI, TWI, RSB and UART

# R-TP Controller

- 4-wire resistive TP interface
- 2 points

#### **Boot Devices**

- SPI NAND Flash
- SPI Nor Flash
- SD Card
- USB

# Ultra-low System Power Consumption

- 30~40% lower than competitors
- Smart Backlight: auto adjust backlight acc. to the image display

#### Package

eLQFP128



# F1C100A

# Application



# Benefits

- Optimum multimedia and processing abilities
- Lower power consumption of HD videos
- Much faster, easier and cost efficient product launch due to the high integration
- Further development kits, including OS BSP(LINUX /MELIS)

#### Contact

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#### **% Company Profile**

Allwinner Technology, established in 2007, is a leading fabless semiconductor company in China, supplying customers with cost-efficient SoC products as well as market-oriented total solutions. In the past few years, Allwinner Technology has won great reputation in HD PMP and HD Media box, and currently is dedicated to the research of connected videos, such as *CLOUD Video and CLOUD Device System Solution*.

This brief is for reference only and has no commitment. All content contained herein is subject to changes without notice. For more information, please contact service@allwinnertech.com.