

ACTIONS-M

Revision History

Version	Date	Description	Author
1.0	06/27/2018	Initial Create	maweishuo

ACTIONS-MICRO

1 Introduction

The AM8268N processor from Actions-Micro is a highly integrated mix signal SoC target at multi-media applications. The AM8268N emmedded CPU is a high performance, low power 32bit RISC core with DSP instruction extension, which can run as fast as 800MHz.

The AM8268N processor features a hardwired multi-format video decoder, which supports a large variety of popular video formats including: H.264, RMVB, MPEG1/2/4 and VC1 at full HD resolution. The AM8268N integrated image/video post processor and display engine provide a powerful image processing ability, such as seamless zoom in/zoom out, cropping, rotation, color space conversion, gamma correction, edge enhancement, dithering, brightness, contrast and saturation adjustment. Moreover, a configurable FIR is reserved for other special effects extension. The 2 layers of OSD window can be configured as large as full screen and the color depth is ranging from 1 bit to 32bit true color.

The AM8268N multi-media processor provided display solutions: with the help of on chip HDMI.

AM8268N is also integrated with a DDR2/DDR3 SDRAM controller, 1 USB OTG controllers, UART, I2C, SPI,etc.

There is a 512Mb DDR2 memory die integrated in AM8268N, so no need to hang a DDR2 memory on PCB.

2 Feature

The AM8268N provides high level of system integration to support a wide variety of applications. The features of the AM8268N include:

- ✓ **32BIT RISC CORE**
 - 32K byte instruction cache and data cache
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✓ **MEMORY CONTROLLER**

- Integrated with a 512Mb DDR2 die which is up to 1066Mbps
- OTP ROM 64bit Chip ID

✓ **DMA CONTROLLER**

- 8 physical channels and 4 bus channels
- Stride mode support
- Software configurable priority

✓ **Boot ROM**

- On chip boot ROM with boot loader
- The system could be loaded from SPI Nor flash

✓ **USB 2.0 OTG**

- Complies with Universal Serial Bus Specification, Revision 2.0.
- Complies with On-The-Go Supplement to the USB2.0 Specification Revision 1.0a.
- Supports point-to-point communication with one low-speed, full-speed or high-speed device in Host mode.
- Supports full-speed or high-speed in peripheral mode.
- Supports USB Mass Storage Class Bulk-Only Transport Revision 1.0 as host or device.
- Supports Electronic still picture imaging Picture Transfer Protocol (PTP)
- Supports direct print function using pict-bridge
- Supports Universal Serial Bus Device

ACTIONS.

