System LSI for Public Displays MN81010H

■ Overview

"MN81010H" is a system LSI for public displays that features a variety of interfaces and delivers multi-purpose digital signage solutions.

It supports multi-screen configurations, is network compatible, and can be used to efficiently develop public display products in varying configurations.

■ Features

- The built-in high-performance CPU (ARM CA9) and high-performance GPU (OpenGL ES2.0) deliver a wide range of effects and quick response with a high-speed graphics rendering.

- A vast range of content playback is supported. For example, content playback over the network and various media playback (USB etc.) are supported.

- Multi-screen compatibility allows expansion to arrays of up to 10 x 10 panels. In order that the multiple panels look seamlessly as a single screen, it is possible to adjust individually the size/ position and chromaticity/ brightness of the displayed image in each panel.

- Since many peripherals are incorporated, systems can be built with the minimum amount of external components.

■ Applications

"MN81010H" is well-suited to a wide range of display products, including multi-screen displays and digital signage devices.

Multi-screen displays

- Large screen displays up to 10 x 10 panels
- Enables seamless, natural images
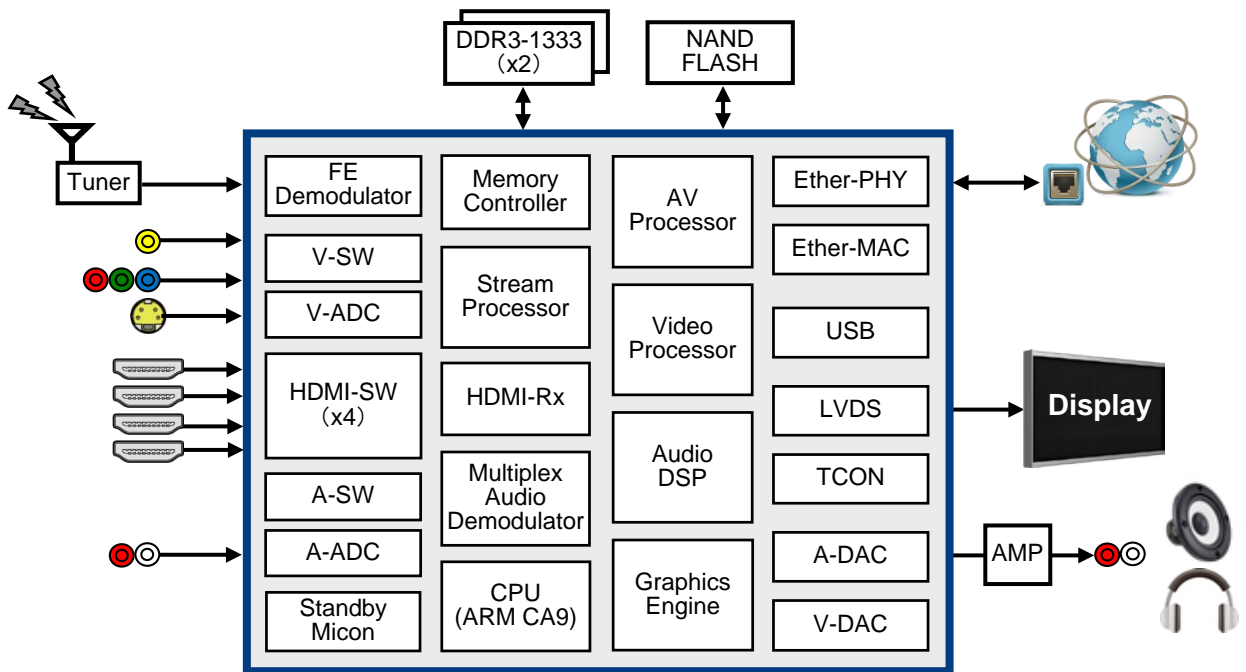
Digital signage devices

- Low-cost, space-saving interactive signage
- Features include eye-catching video effects

■ Specifications

Function		Specifications
Package		BGA / 21mm x 21mm / 0.8mm pitch
CPU		ARM CA9 800MHz (2,000 DMIPS)
Graphics		OpenGL ES2.0
Memory		DDR3-1333 (16bit) x2
AV Decoder		On the air / Network
Demodulator		ATSC, QAM, DVB-T/C, ISDB-T/S
Standby Microcontroller		Build-in
I/O	Ethernet	Build-in MAC + PHY
	USB	USB2.0-HS x3
	HDMI Input	Ver1.4a x4 *One port supports ARC.
	Analog Video Input	CVBS, YC, YPbPr, VGA
	LVDS Output	LVDS / mini-LVDS (60Hz)
Video Processor	HQ Picture	High quality IP convertor and Noise reducer Super-resolution
	FRC	No
	TCON	Yes (60Hz)

■ System Configuration(Example)