

Full support for DVD applications

Chip Set for DVD Player

Overview

DVD (Digital Video Disc or Digital Versatile Disc) system is expected as the front runner of the multimedia equipment. We have developed the chip set dedicated for 2nd generation. Using this chip set, you can make easily compact DVD player with excellent high performance.

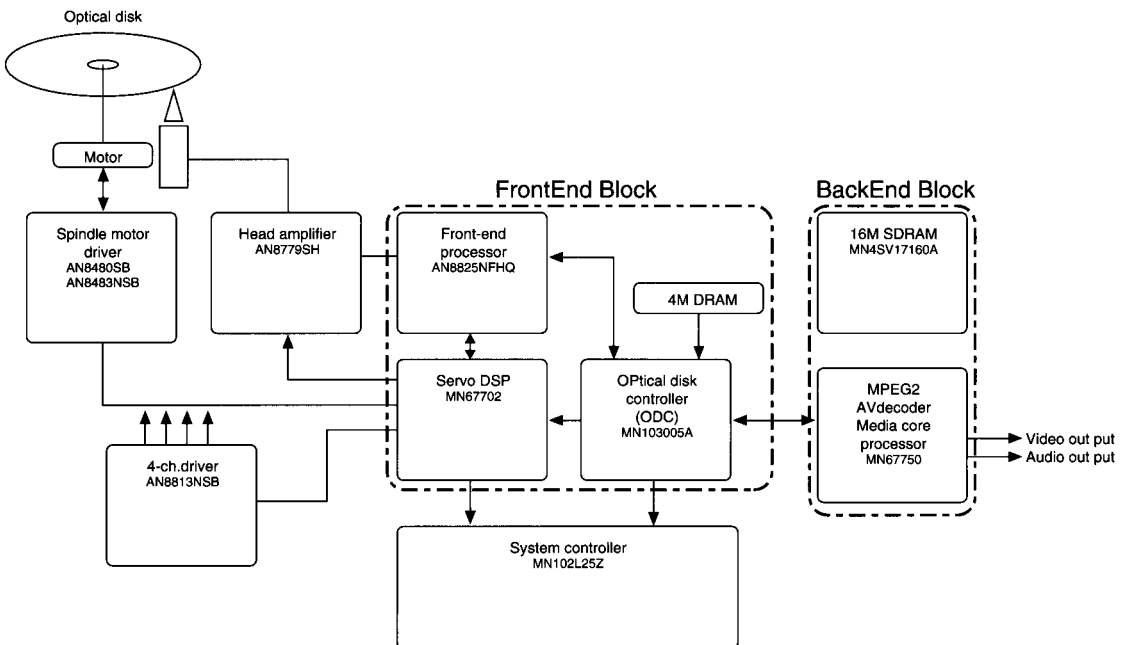
Features

- With the new developed Media Core Processor™, all of audio/video functions are integrated into a single chip decoder LSI. (MN67750)
- With a high-performance 32bit micro controller core, the MN103005A can handle many types of optical discs like DVD, DVD-ROM, Video-CD, CD-ROM, CD-audio.
- All of analog signal processings of the optical discs are integrated into the the front end processor (FEP). (AN8825)

Application

DVD player

System block diagram of DVD player



* Dolby AC-3 is the registered trademark of Dolby Laboratories Licensing Corporation.

† The products and specifications are subject to change without any notice. Please ask for the latest Product Standards to guarantee the satisfaction of your product requirements.

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■ Lineup of semiconductors for DVD player

Function	Product name	Characteristics	Package
MPEG2 AV decoder (Media Core Processor™)	MN67750	<ul style="list-style-type: none"> • MPEG2 (MP@ML), MPEG1 Video decoding • Dolby digital (AC-3)*1, MEGEG1/2 Multi-channel decoding • Subpicture decoding • NTSC/PAL encoder with Macrovision*2 (Version 7.01) copy guard • Video DAC 3channel 	QFP-208pin
Optical disk controller	MN103005A	<ul style="list-style-type: none"> • Demodulation and ECC DVD-ROM [2×] speed, CD-ROM [24×] speed • ATAPI I/F • Vcc:3.3±0.3V, 5.0±0.5V • Operating frequency:54MHz 	QFP 176pin
Servo DSP	MN67702	<ul style="list-style-type: none"> • Focusing, tracking and traverse servo control. • Vcc:5.0±0.5V/3.3±0.3V • Operating frequency:54MHz/40MHz • 8-bit AD (13.5MHz)×12ch, 8-bit DA×8ch 	QFP 100pin LQFP 100pin
Head amplifier	AN8779SH	<ul style="list-style-type: none"> • Vcc:5.0±0.5V • low noise, low offset, high speed I-V Amplifier • Gain switching available 	SSONF-28D
Front-end processor	AN8825NFHQ	<ul style="list-style-type: none"> • Vcc:5.0±0.5V • High band Read channel function (AGC, EQ, DSL, PLL) • Fo, Tr servo amplifier 	QFS-100HP14
System controller (16-bit)	MN102L25Z	<ul style="list-style-type: none"> • CPU:Load/store • Built-in ROM 128k bytes, built-in RAM 3k bytes • Operating frequency:≤20MHz • Supply voltage:4.5~5.5V • Serial 2ch., AD 8ch. 	LQFP100-P-1414
4-ch. driver	AN8813NSB	<ul style="list-style-type: none"> • Vcc:4.5V~14V • Pd:2.5W (Mounted on board 25°C 75×75, 1.6mm glass-epoxy) • Iout:800mA • Built-in 4 amplifier with OP-AMP technique (1ch is Exclusive Amp. for loading) 	HSOP042-P-0400 USOF-28D
Spindle motor driver	AN8480SB	<ul style="list-style-type: none"> • VM:12V (14.4V max.) • Pd:2.2W (Mounted on board 25°C 75×75, 1.6mm glass-epoxy) • Iout:0.66A (1.2A max.) • Built-in reverse rotation protector, FG output, short BRK, gain switching available 	HSOP042-P-0400 USOF-28D
	AN8483NSB*	<ul style="list-style-type: none"> • VM:12V (14.4V max.) • Pd:2.7W (Mounted on standard board 25°C 75×75, 0.8mm) • Iout:0.5A (1.2A max.) • Built-in reverse rotation protector, FG output, short BRK, TSD FLG 	HSOP042-P-0400A UHSOF-28D
16M SDRAM	MN4SV17160A	<ul style="list-style-type: none"> • Memory organization:512k words×16-bit×2 banks • Operating frequency:83MHz • Supply voltage:3.3±0.3V 	TSOP-50pin

* : Under development