

MN8260

Audio Processing LSI for MUSE Decoders

■ Overview

The MN8260 is a low-cost LSI that permits the creation of a MUSE audio decoder with only three chips: the MN8260, a general-purpose 256-kilobyte SRAM, and a two-channel D/A converter. It thus streamlines the design of an MUSE to NTSC converter unit when used in an wide-screen television receiver together with an MUSE to NTSC video converter LSI. Adding an external D/A converter produces a decoder fully complying with the full MUSE specifications.

■ Features

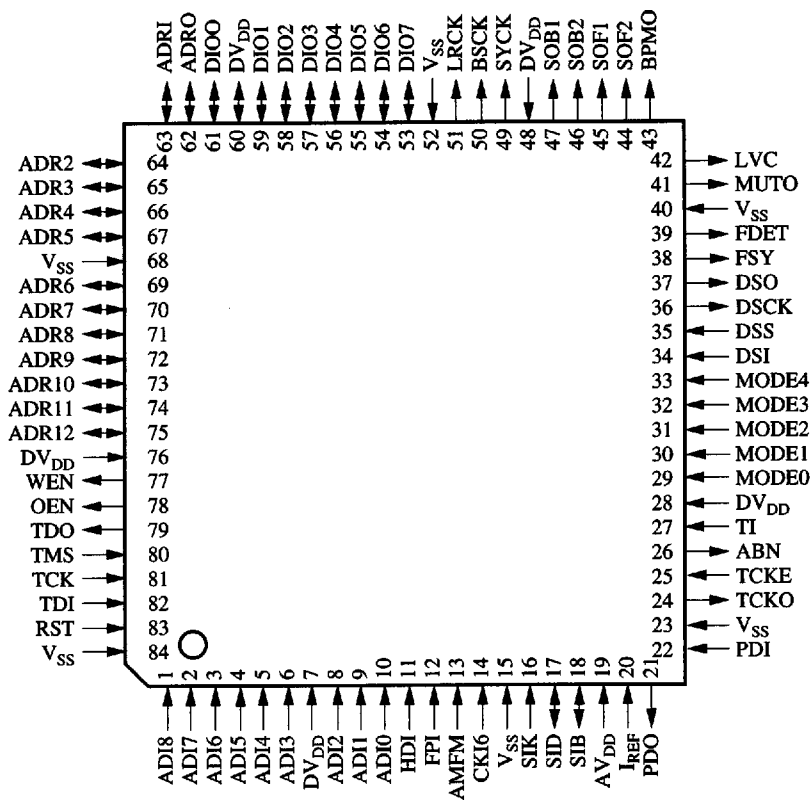
- Produces an MUSE to NTSC converter when used in conjunction with an MUSE to NTSC video converter LSI.
- Contains built-in voltage-controlled oscillator (phase-locked loop that requires no adjustment).
- Supports both the MUSE and I²C buses.
- Provides four serial audio data outputs each before and after selection.
- Offers a selection of 22 audio modes.
- Provides biphas modulation output.
- Supports boundary scan.
- Operating voltage 5V

■ Applications

- MUSE to NTSC converters, MUSE decoders



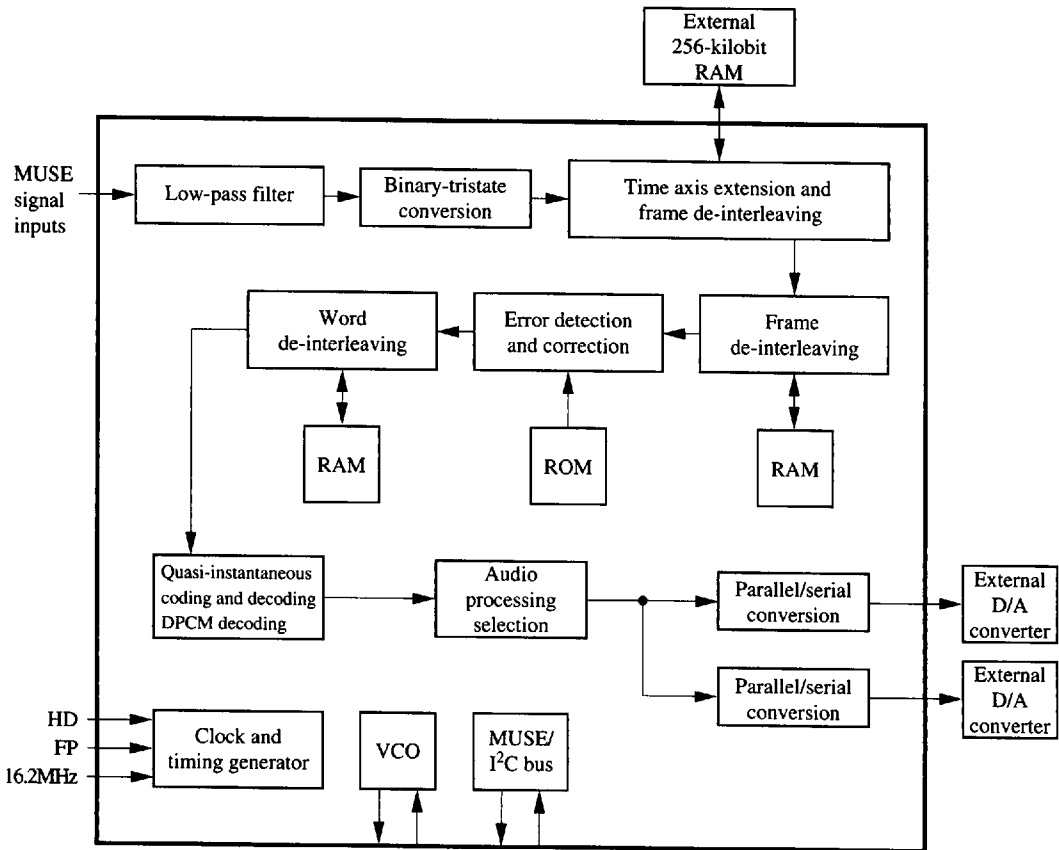
■ Pin Assignment



(TOP VIEW)

QFP084-P-1818E

■ Block Diagram



For Video Equipment

■ Pin Descriptions

Pin No.	Symbol	I/O	Function Description
1	ADI8	I	MUSE audio data input (MSB)
2	ADI7	I	MUSE audio data input
3	ADI6	I	MUSE audio data input
4	ADI5	I	MUSE audio data input
5	ADI4	I	MUSE audio data input
6	ADI3	I	MUSE audio data input
7	DV _{DD}	I	Power supply
8	ADI2	I	MUSE audio data input
9	ADI1	I	MUSE audio data input
10	ADI0	I	MUSE audio data input (LSB)
11	HDI	I	Horizontal synchronization pulse input
12	FPI	I	Frame synchronization pulse input
13	AMFM	I	MUSE signal modulation mode discrimination input
14	CKI6	I	Clock input
15	V _{SS}	I	GND
16	SIK	I	Clock input (MUSE bus) or fixed level ("H" or "L") (I ² C bus)
17	SID	I/O	Data I/O (MUSE bus) or SDA (I ² C bus)
18	SIB	I/O	Busy I/O (MUSE bus) or SCL (I ² C bus)
19	AV _{DD}	I	Power supply
20	I _{REF}	I	PLL reference current setting
21	PDO	O	Phase comparator output
22	PDI	I	VCO voltage control input
23	V _{SS}	I	GND
24	TCKO	O	VCO test output (Leave this pin open.)
25	TCKE	I	TCKO control (Keep this pin at "L" level.)
26	ABN	O	Audio A/B mode discrimination output
27	TI	I	Test input (Keep this pin at "L" level.)
28	DV _{DD}	I	Power supply
29	MODE0	I	Operating mode setting input
30	MODE1	I	Operating mode setting input
31	MODE2	I	Operating mode setting input
32	MODE3	I	Operating mode setting input
33	MODE4	I	Operating mode setting input
34	DSI	I	PN signal input for descrambling
35	DSS	I	PN signal input enable
36	DSCK	O	1.35-MHz clock output
37	DSO	O	Serial data output after descrambling
38	FSY	O	Audio frame timing signal output
39	FDET	O	Frame synchronization lock detection output
40	V _{SS}	I	GND
41	MUTO	O	Mute output for analog audio circuit
42	LVC	O	Level correction output for analog audio circuit

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■ Pin Descriptions (continued)

Pin No.	Symbol	I/O	Function Description
43	BPMO	O	Biphase modulation output
44	SOF2	O	D/A converter connector pins for audio signal before mode selection
45	SOF1	O	D/A converter connector pins for audio signal before mode selection
46	SOB2	O	D/A converter connector pins for audio signal after mode selection
47	SOB1	O	D/A converter connector pins for audio signal after mode selection
48	DV _{DD}	I	Power supply
49	SYCK	O	Audio system clock output
50	BSCK	O	Audio data bit shift clock output
51	LRCK	O	Audio data channel discrimination output
52	V _{SS}	I	GND
53	DIO7	I/O	Data I/O (MSB)
54	DIO6	I/O	Data I/O
55	DIO5	I/O	Data I/O
56	DIO4	I/O	Data I/O
57	DIO3	I/O	Data I/O
58	DIO2	I/O	Data I/O
59	DIO1	I/O	Data I/O
60	DV _{DD}	I	Power supply
61	DIO0	I/O	Data I/O (LSB)
62	ADR0	I/O	Address output (LSB)
63	ADR1	I/O	Address output
64	ADR2	I/O	Address output
65	ADR3	I/O	Address output
66	ADR4	I/O	Address output
67	ADR5	I/O	Address output
68	V _{SS}	I	GND
69	ADR6	I/O	Address output
70	ADR7	I/O	Address output
71	ADR8	I/O	Address output
72	ADR9	I/O	Address output
73	ADR10	I/O	Address output
74	ADR11	I/O	Address output
75	ADR12	I/O	Address output (MSB)
76	DV _{DD}	I	Power supply
77	WEN	O	Write enable output
78	OEN	O	Output enable output
79	TDO	O	Test data output
80	TMS	I	Test mode select input
81	TCK	I	Test clock input
82	TDI	I	Test data input
83	RST	I	Reset input
84	V _{SS}	I	GND

For Video
Equipment

■ Package Dimensions (Unit: mm)

QFP084-P-1818E

