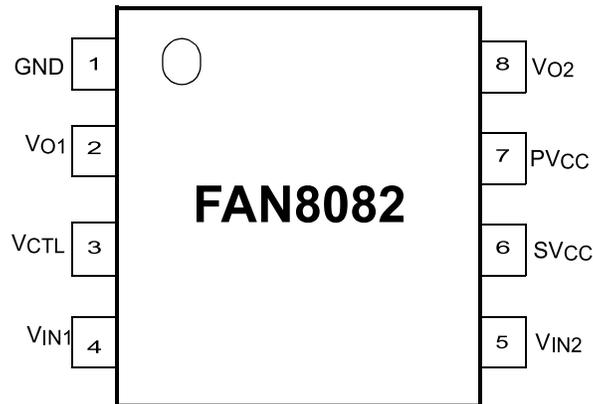


7. IC Block Diagrams

7-1 Main

7-1-1. FAN8082

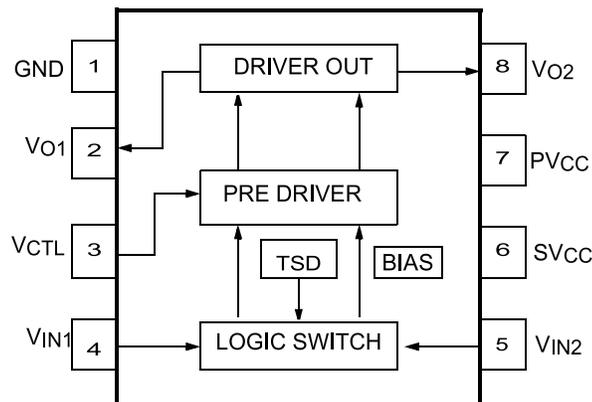
Pin Assignments



Pin Definitions

Pin Number	Pin Name	I/O	Pin Function Description
1	GND	-	Ground
2	VO1	O	Output 1
3	VCTL	I	Motor speed control
4	VIN1	I	Input 1
5	VIN2	I	Input 2
6	SVCC	-	Supply voltage (Signal)
7	PVCC	-	Supply voltage (Power)
8	VO2	O	Output 2

Internal Block Diagram



7-1-2. MAX232

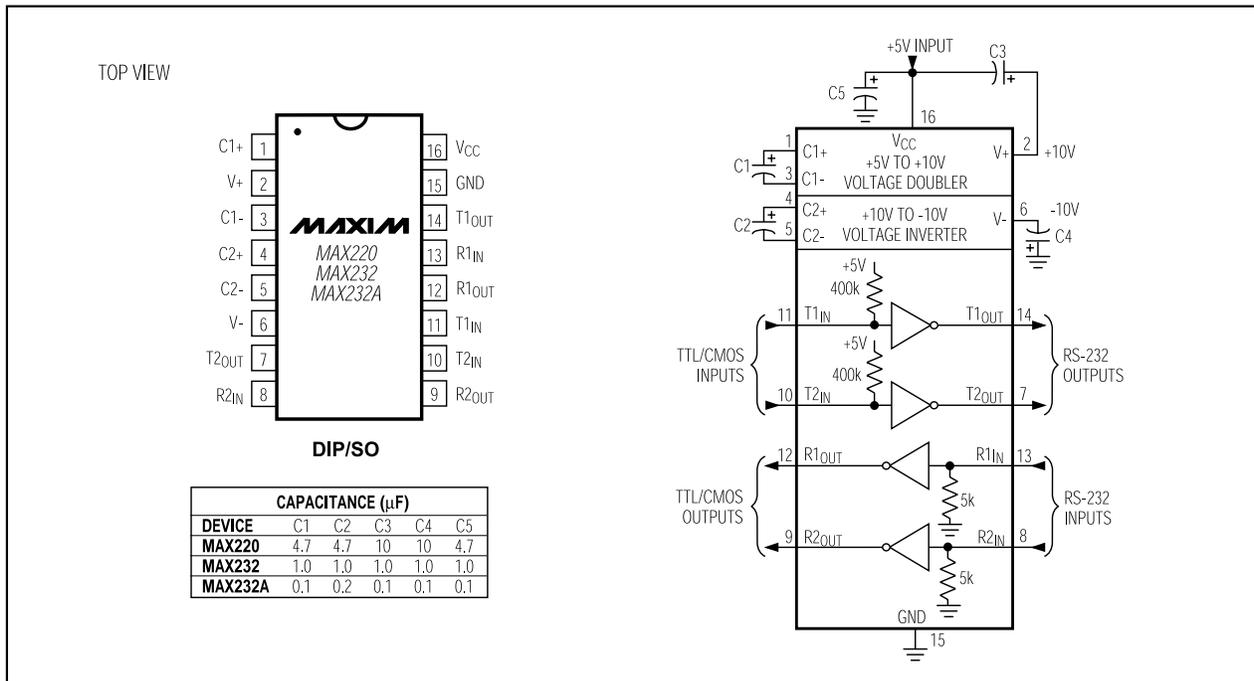


Figure 5. MAX220/MAX232/MAX232A Pin Configuration and Typical Operating Circuit

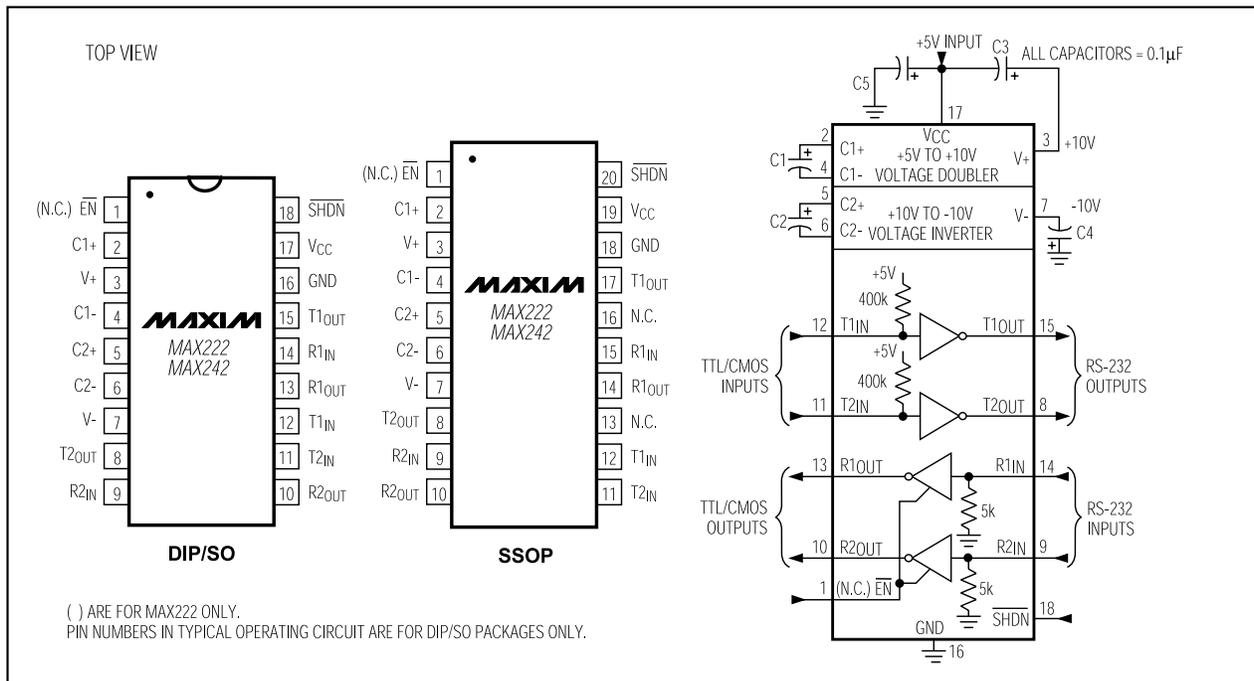
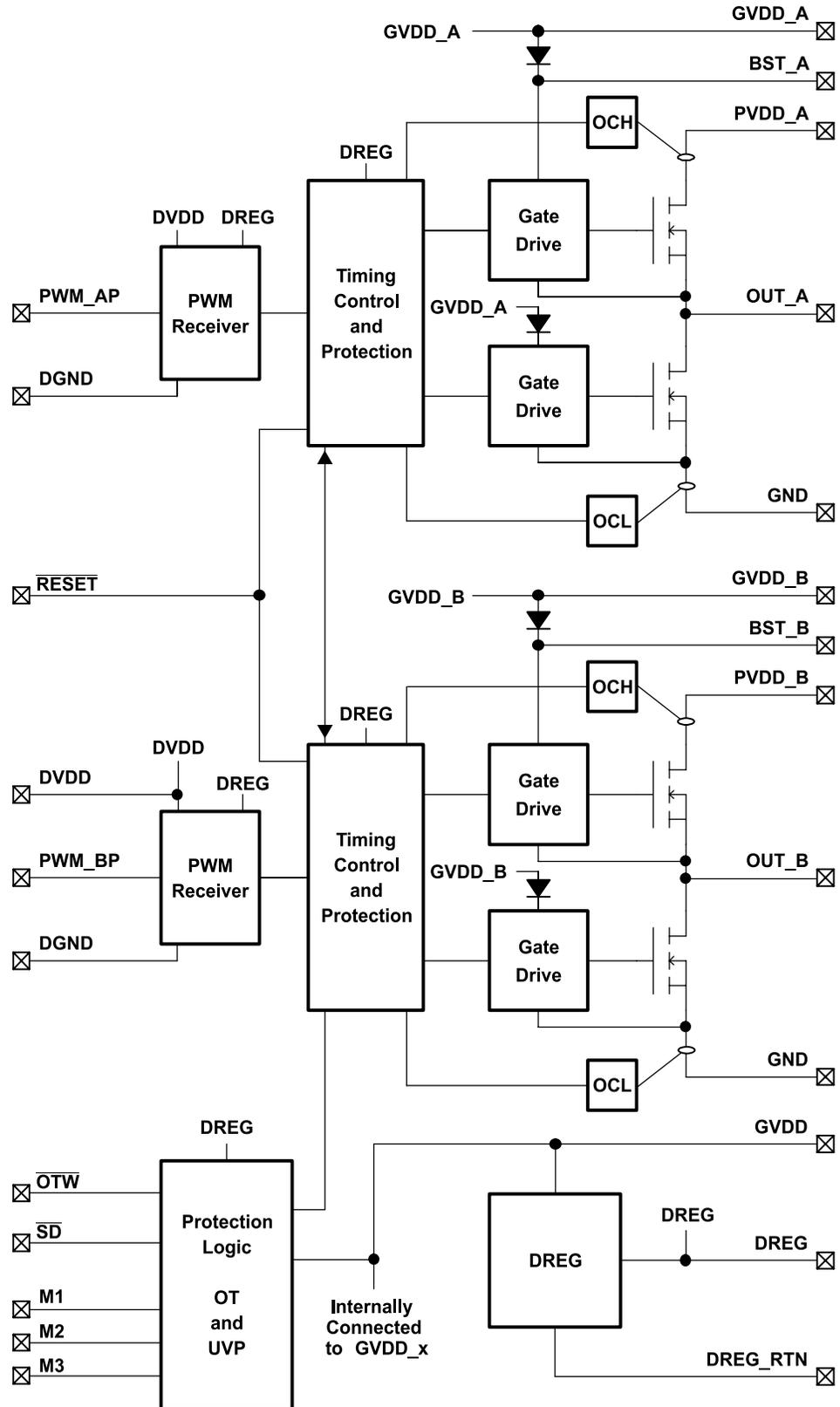
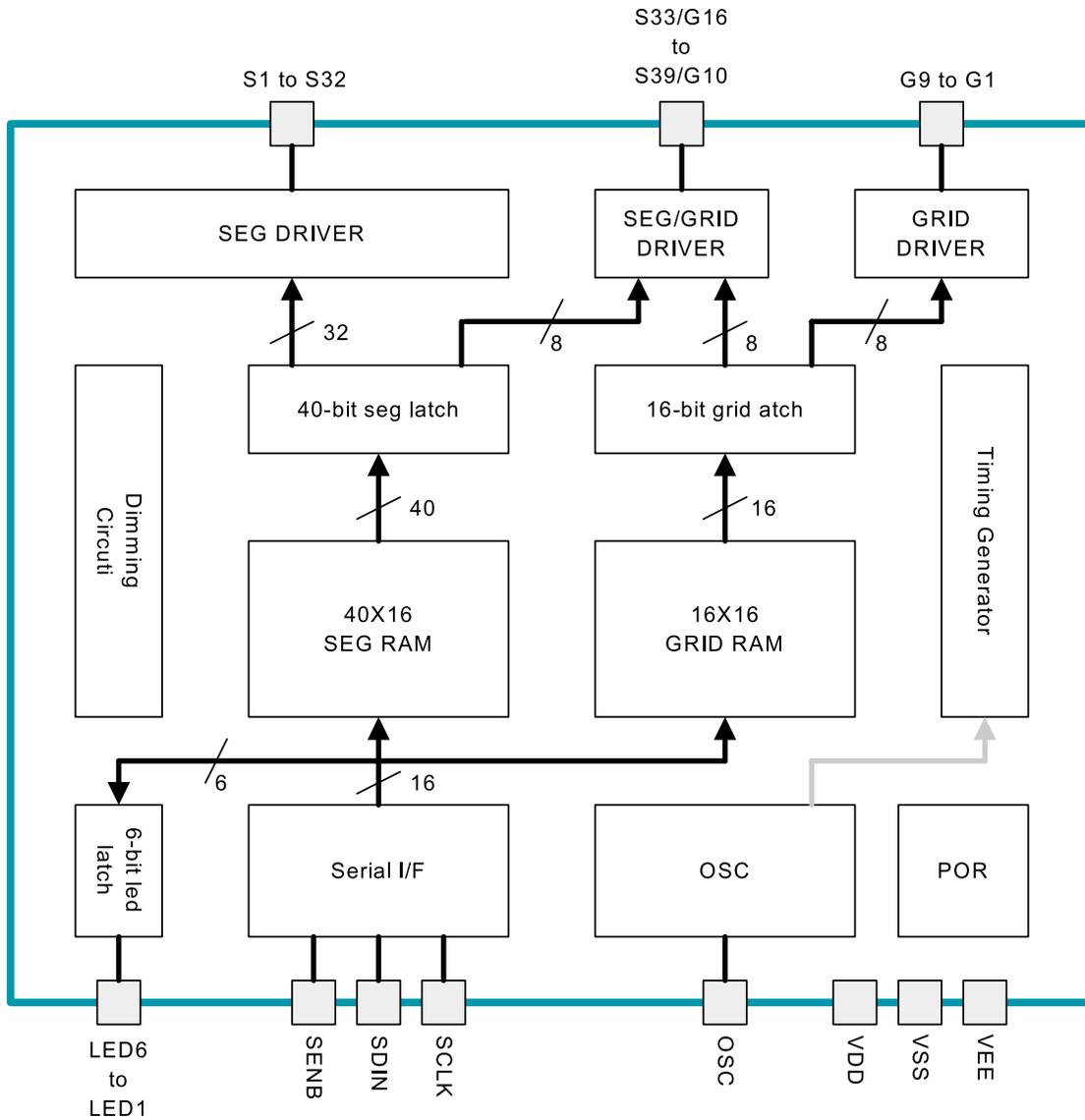


Figure 6. MAX222/MAX242 Pin Configurations and Typical Operating Circuit

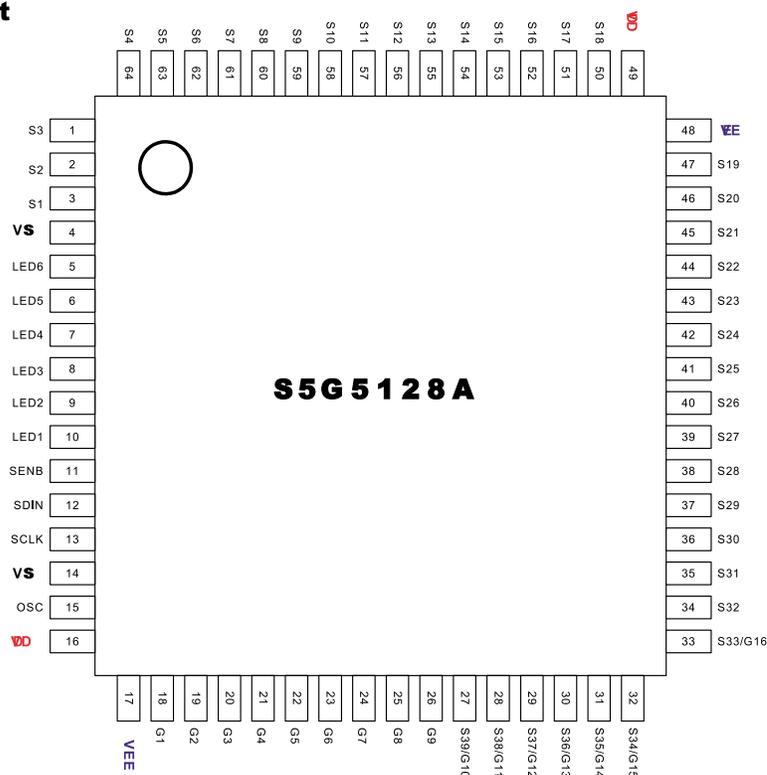
FUNCTIONAL BLOCK DIAGRAM



Block Diagram



Pin Assignment

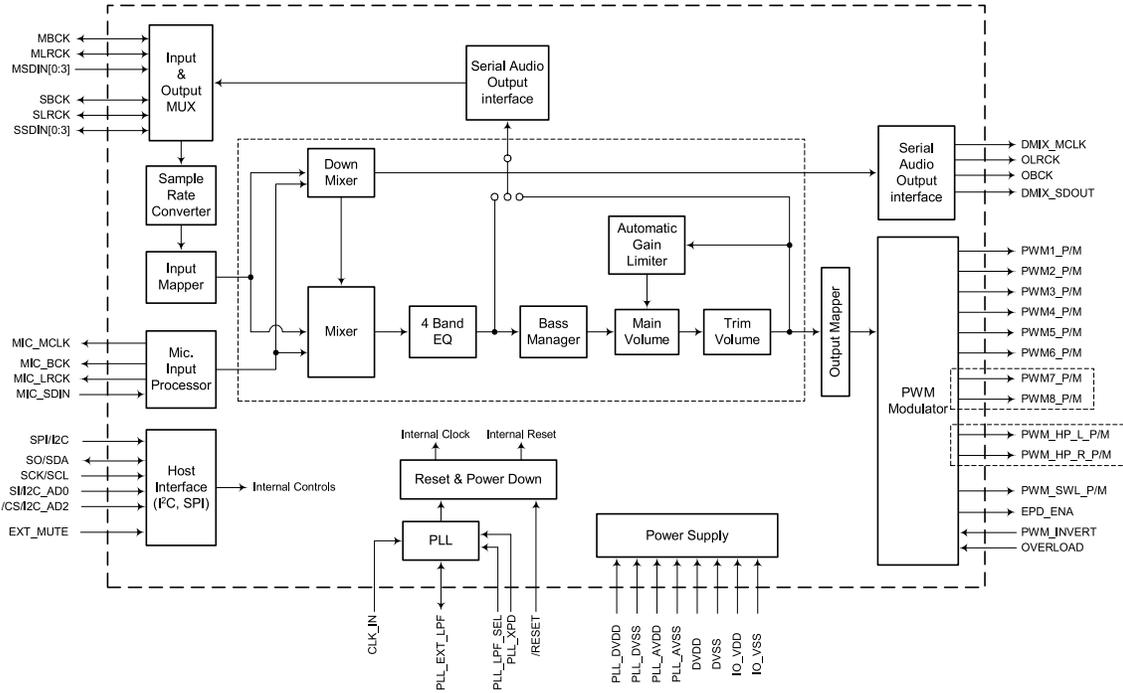


Pin Description

Pin No.	Name	Function	IN/OUT
1 to 3	S3 to S1	Segment driver output pins (segment only). This is P-ch open-drain output with pull-down resistor	O
5 to 10	LED6 to LED1	6 LED driver output ports. This is a CMOS output pin.	O
11	SENB	Serial Interface Enable All shifted data is latched into the corresponding register at the rising edge of SENB.	I
12	SDIN	Serial Interface Data IN Input serial data at the rising edge of the shift clock.	I
13	SCLK	Serial Interface Clock Reads serial data at the rising edge when SENB is low	I
15	OSC	Connected to an external resistor or an RC oscillator circuit.	I/O
18 to 26	G1 to G9	Grid driver output pins (Grid only). This is push-pull cmos output.	O
27 to 33	S39/G10 to S33/G16	Segment or Grid driver output pins. These pins are selectable for segment or grid driving. This is P-ch open-drain output with pull-down resistor	O
34 to 47	S32 to S19	Segment driver output pins (segment only). This is P-ch open-drain output with pull-down resistor	O
50 to 64	S18 to S4	Segment driver output pins (segment only). This P-ch open-drain output with pull-down resistor	O
16,49	VDD	Positive power (Internally connected)	PWR
4,14	VSS	Ground (Internally connected)	GND
17,48	VEE	Negative power for driving VFD Panel (Internally connected)	PWR

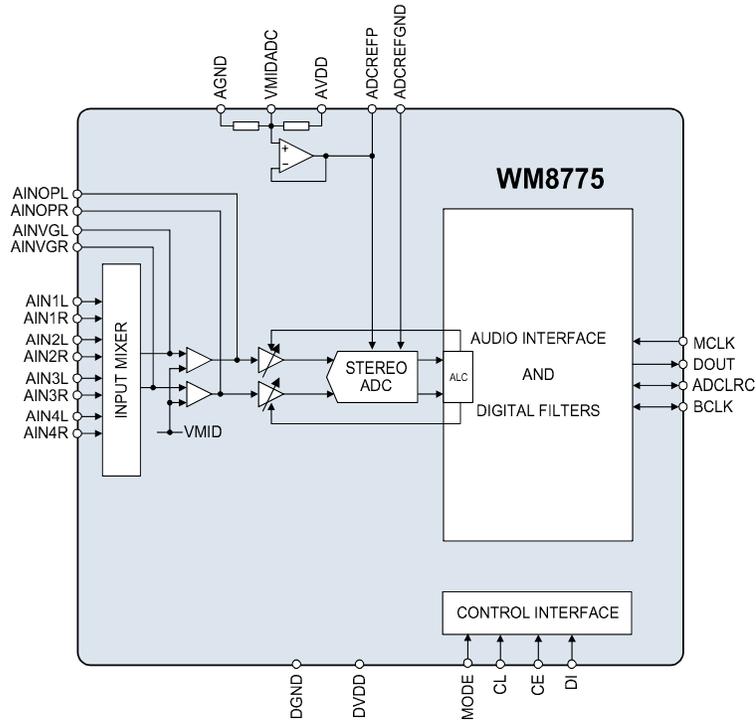
7-1-5. PS9818

Functional Block Diagram



7-1-6. WM8775

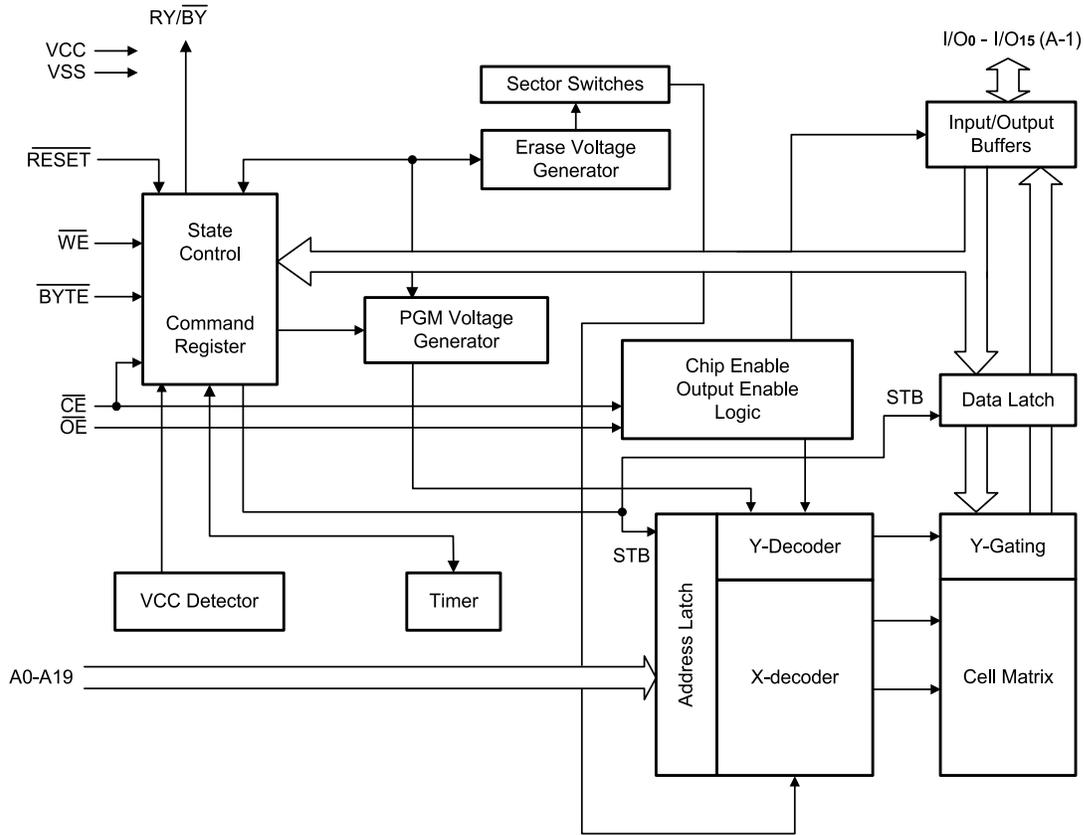
BLOCK DIAGRAM



7-2 DVD

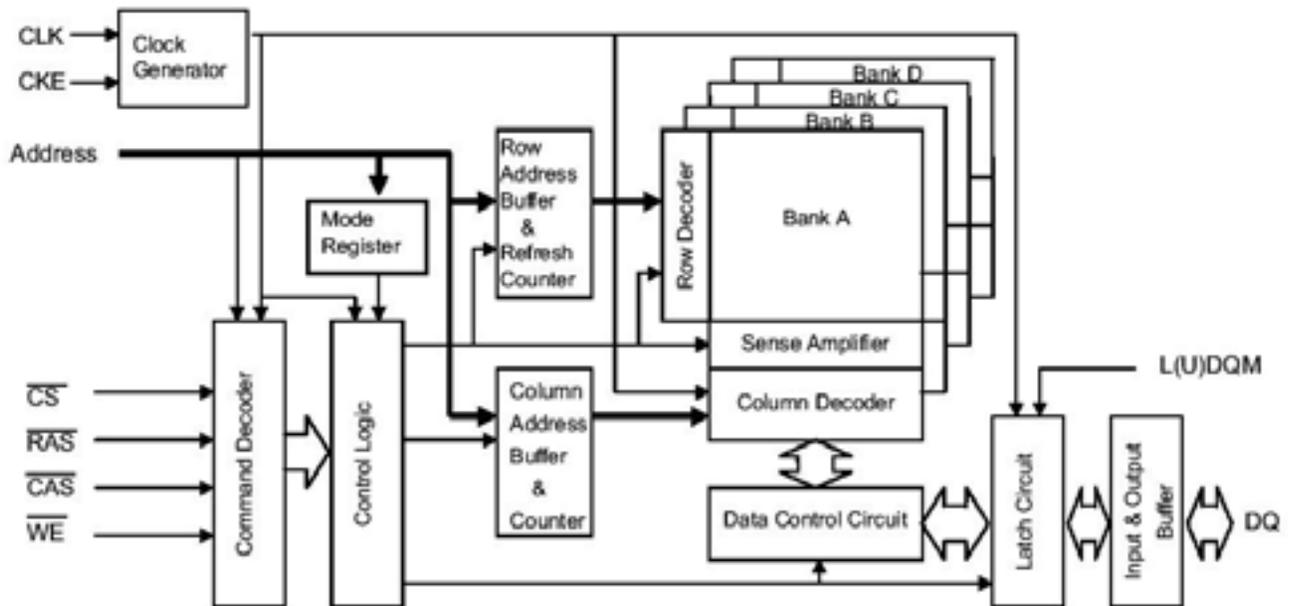
7-2-1. A29L160

Block Diagram

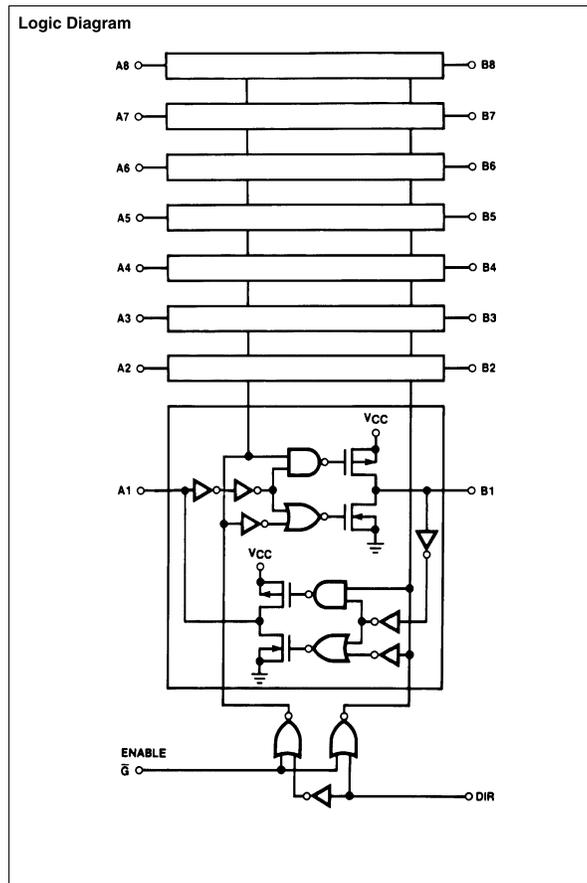


7-2-2. ESMT_M12L128168A

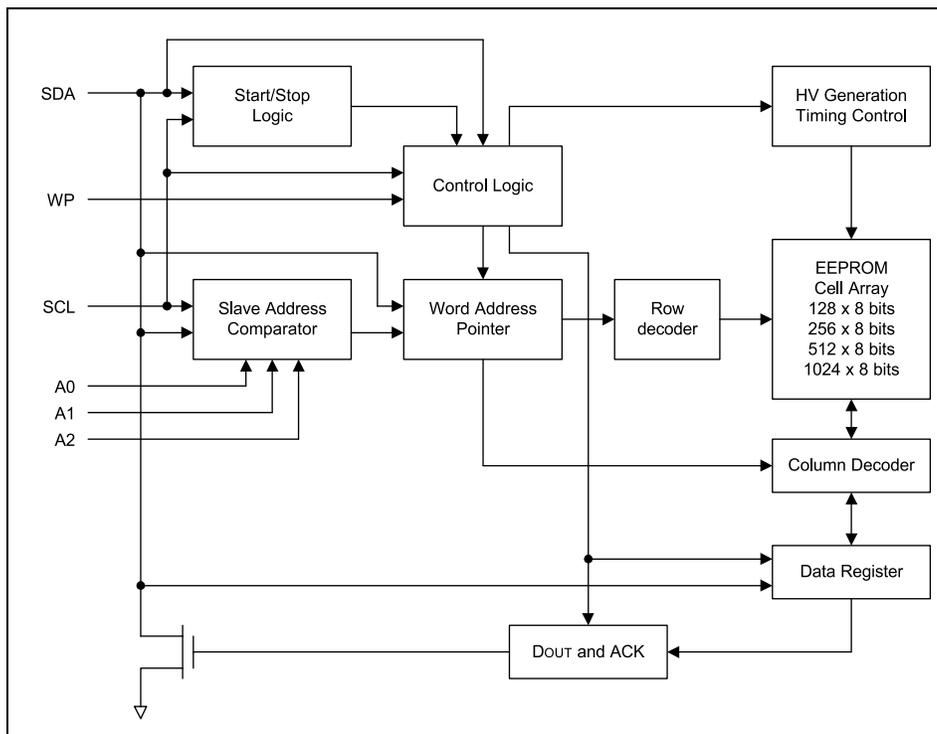
BLOCK DIAGRAM



7-2-3. 74HCT245



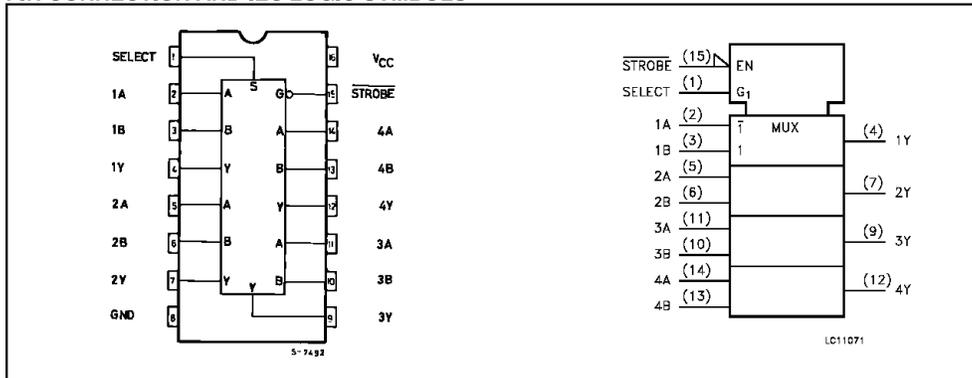
7-2-4. S524C20D21_20D41



S524C20D11/20D21/80D41/80D81 Block Diagram

7-2-5. STM_74LCX157

PIN CONNECTION AND IEC LOGIC SYMBOLS

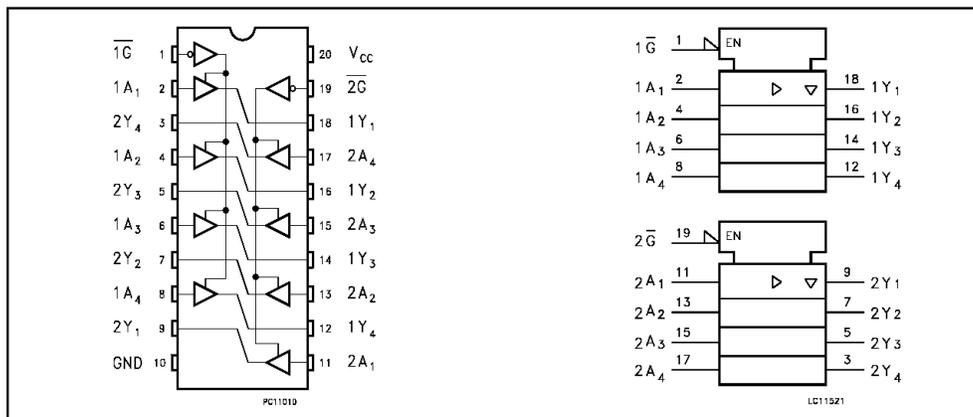


PIN DESCRIPTION

PIN No	SYMBOL	NAME AND FUNCTION
1	SELECT	Common Data Select Inputs
2, 5, 11, 14	1A to 4A	Data Inputs From Source A
3, 6, 10, 13	1B to 4B	Data Inputs From Source B
4, 7, 9, 12	1Y to 4Y	Multiplexer Outputs
15	STROBE	Strobe Input
8	GND	Ground (0V)
16	V _{CC}	Positive Supply Voltage

7-2-6. STM_74LCX244

PIN CONNECTION AND IEC LOGIC SYMBOLS



PIN DESCRIPTION

PIN No	SYMBOL	NAME AND FUNCTION
1	1G	Output Enable Input
2, 4, 6, 8	1A1 to 1A4	Data Inputs
9, 7, 5, 3	2Y1 to 2Y4	Data Outputs
11, 13, 15, 17	2A1 to 2A4	Data Inputs
18, 16, 14, 12	1Y1 to 1Y4	Data Outputs
19	2G	Output Enable Input
10	GND	Ground (0V)
20	V _{CC}	Positive Supply Voltage

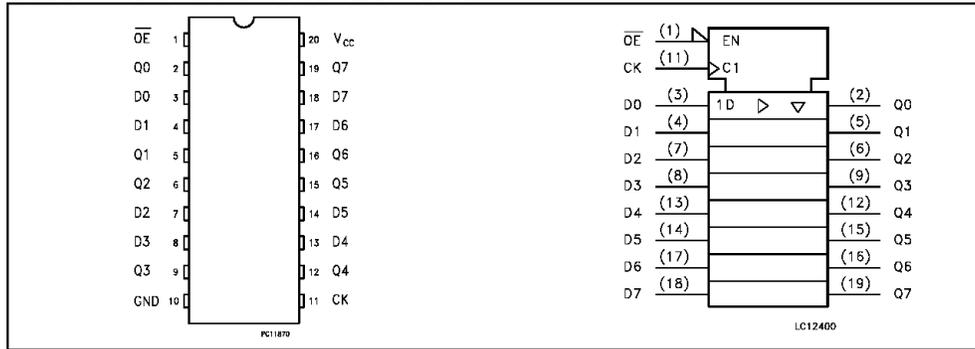
TRUTH TABLE

INPUT		OUTPUT
G	A _n	Y _n
L	L	L
L	H	H
H	X	Z

X : Don't Care
Z : High Impedance

8-2-7. STM_74LCX374

PIN CONNECTION AND IEC LOGIC SYMBOLS



PIN DESCRIPTION

PIN No	SYMBOL	NAME AND FUNCTION
1	OE	3 State Output Enable Input (Active LOW)
2, 5, 6, 9, 12, 15, 16, 19	Q0 to Q7	3-State Outputs
3, 4, 7, 8, 13, 14, 17, 18	D0 to D7	Data Inputs
11	CK	Clock Input (LOW to HIGH edge triggered)
10	GND	Ground (0V)
20	V _{CC}	Positive Supply Voltage

TRUTH TABLE

INPUT			OUTPUT
OE	CK	D	Q
H	X	X	Z
L		X	NO CHANGE
L		L	L
L		H	H

X : Don't Care
Z : High Impedance

7-3 MICOM PORT ASSIGNMENT

KD800/800W MICOM PORT

(LC877448)

rev0

NO	PORT	NAME	I/O	TYPE	FUNCTION	NO	PORT	NAME	I/O	TYPE	FUNCTION
1	P06	P-TXD	0		P-TXD	51	PC5	OPT 06	0		OPTION OUT6
2	P07	P-STB	0		P-STB 52		PC6				
3	P10	P-RESET	0		PACK RESET	53	PC7				
4	P11	P-ACK	1		PACK ACK	54	VDD2	VDD2			VDD 5V
5	P12	WM-CE	0		CE(WM8775)	55	VSS2	VSS2			GND
6	P13	UART1	0		ANY-ART RX	56	PD0	OPT 11	1		OPTION IN1
7	P14	UART2	0		ANY-ART TX	57	PD1	OPT 12	1		OPTION IN2
8	P15	ANY-C	0		ANY-CON	58	PD2	OPT 13	1		OPTION IN3
9	P16	CK	0		PS/WM/TU/WL CLK	59	PD3	OPT 14	1		OPTION IN4
10	P17	D0	0		PS/WM/TU/WL DATA	60	PD4				
11	RES	RESET	1		MICOM RESET	61	PD5				
12	XT1	XT1	1		NC(PULL UP)	62	PD6				
13	XT2	XT2	0		NC(OPEN)	63	PD7				
14	VSS1	GND			GND	64	PE0				
15	CF1	CF1	1		10MHZ OSC IN	65	PE1				
16	CF2	CF2	0		10MHZ OSC OUT	66	PE2	H/MUTE	0		HEAD PHONE MUTE
17	VDD1	VDD1			VDD 5V	67	PE3	SCART-M	0		SCART MUTE
18	P80	AD1	1	AD	KEY A/D 1	68	PE4	V-SW1	0		A/V SW1
19	P81	AD2	1	AD	DVI Video Selector	69	PE5	V-SW2	0		A/V SW2
20	P82	P-SENS	1		POWER SENSE	70	PE6	M-MUTE	0		ECHO/MIC-MUTE
21	P83	W-SEM	1	INT	W/MIC SENSE	71	PE7				
22	P84	H-SEN	1		HP SENSE	72	PF0				
23	P85	M-SEN	1		MIC SENSE	73	PF1	LED3	0		P/ON LED(Active"L")
24	P86					74	PF2	VFD-CE	0		CE(LC75725)
25	P87	DAB-DAT	1/0		DAB DATA I/O	75	PF3	LED4	0		H/P Surr LED
26	P70	RDS-CK	1	INT	RDS CLK/ DAB REQ	76	PF4	LED5	0		Hall Surr LED
27	P71	P-RXD	1	INT	PACK RXD	77	PF5	LED6	0		Auto SETUP LED
28	P72					78	PF6	LED1	0		Volume LED ON/OFF
29	P73	REMO	1	INT	REMOCON	79	PF7	LED2	0		Volume DIMMER
30	PA0	P-ON	0		POWER ON	80	PL6				
31	PA1					81	PL5	EVR IN	1		VOLUME UP
32	PA2	T-DI	1		TUNER DATA IN	82	PL4	EVR IN	1		VOLUME DOWN
33	PA3	ST	1		STEREO	83	PL0				
34	PA4	TUNED	1		TUNED	84	PL1				
35	PA5	RDS-IN	1		RDS-IN	85	PL2				
36	PA6	T-CE	0		TUNER CE	86	PL3				
37	PA7	DAB-CE	0		DAB CE	87	P30	M-CE	0		M-VM8775-CE
38	PB0	DAB-CK	0		DAB-CLK	88	P31	DAC-CS	0		DAC-CS
39	PB1					89	VSS3	VSS3			GND
40	PB2	DAB-CON	0		DAB CONTROL	90	VDD3	VDD3			VDD 5V
41	PB3	DAB-RES	0		DAB RESET	91	P32	DP-RST	0		DP-RESET
42	PB4					92	P33	MIDI-D	0		MIDI-DVD
43	PB5	TI-RST	0		RESET(TAS5111/5112)	93	P34				
44	PB6	TI-SD	1		SHUT_DOWN(TAS5111/5112)	94	P35	PS-DI	1		S0(PS9818)
45	PB7	TI-OTW	1		OTW(TAS5111/5112)	95	P00	VFD-CK	0		VFD CK
46	PC0	OPT 01	0		OPTION OUT1	96	P01	VFD-D0	0		VFD D0
47	PC1	OPT 02	0		OPTION OUT2	97	P02	OVLD	0		OVERLOAD(PS9818)
48	PC2	OPT 03	0		OPTION OUT3	98	P03	PS-CS	0		CS(PS9818)
49	PC3	OPT 04	0		OPTION OUT4	99	P04	PS-RST	0		RESET(PS9818)
50	PC4	OPT 05	0		OPTION OUT5	100	P05	EXT-M	0		EXT_MUTE(PS9818)

<UPDATE CONNECTION>

6	5	CLK
5	4	DATA0
4	3	DATA1
3	17	VDD
2	14	GND
1	11	RESET

<PACK CONNECTION>

DVD-PACK	MICOM
P-RXD <-->	P-TXD
P-TXD -->	P-RXD
P-ACK <-->	P-STB
P-STB -->	P-ACK

FRONT<---->SUB PCB