

DATA SHEET

Part No.	AN13301A
Package Code No.	QFP048-P-1212C

SEMICONDUCTOR COMPANY
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

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AN13301A

Silicon Monolithic Bi - CMOS IC

■ Function

- Video signal output interface for D - terminal

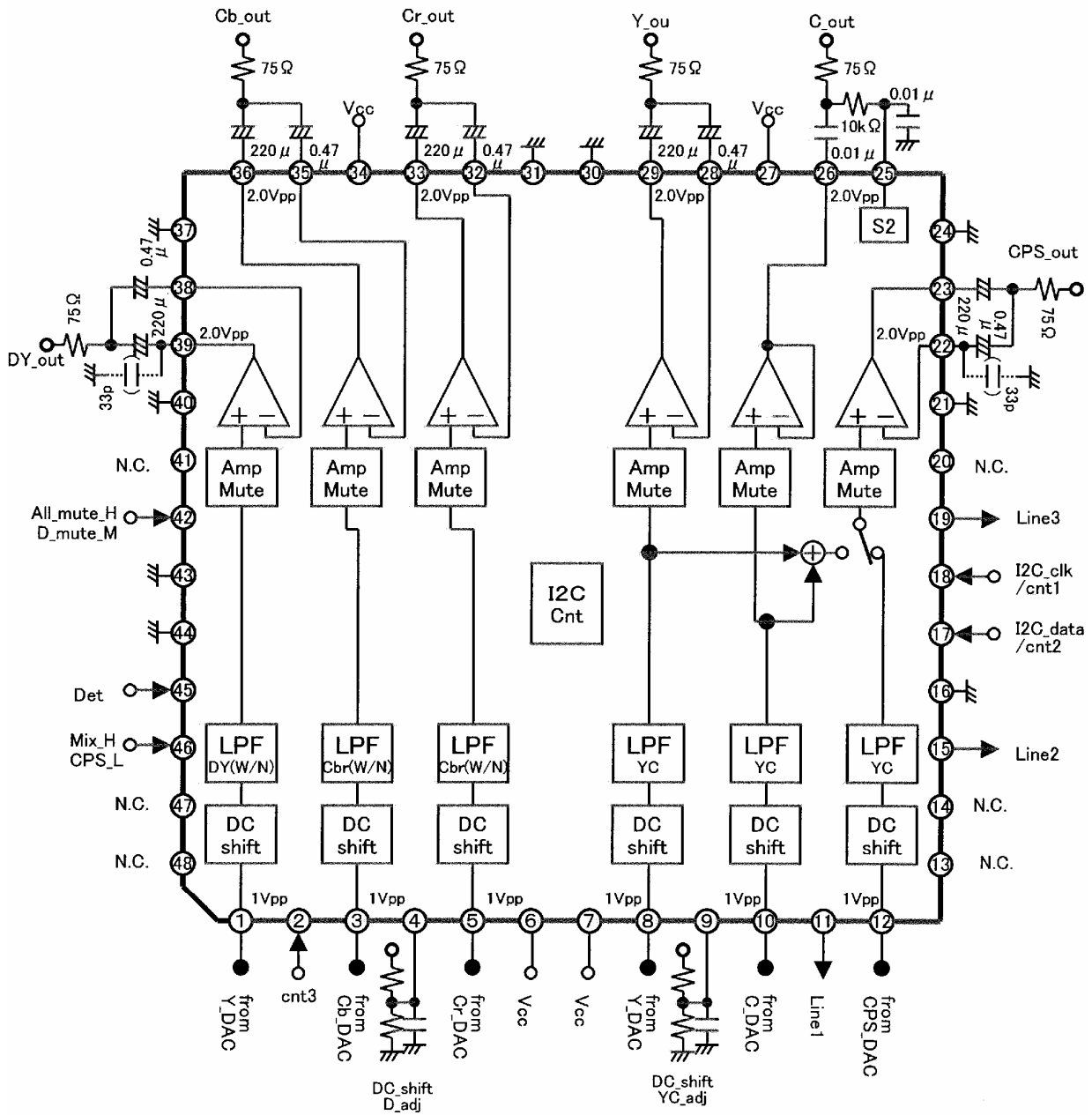
■ Applications

- STB

■ Package

- 4Directions - 48Pin Plastic Package (QFP Type)

■ Block Diagram



■ Pin Descriptions

Pin No.	Function	Impedance	Pin No.	Function	Impedance
1	DY input	Hi - Z	25	S2 output	Lo - Z
2	ctrl 3 input	Hi - Z	26	AC output	E. F.
3	Cb input	Hi - Z	27	V _{CC}	—
4	DC shift	Hi - Z	28	AY Sag compensation	30 kΩ
5	Cr input	Hi-Z	29	AY output	E. F.
6	V _{CC}	—	30	GND	—
7	V _{CC}	—	31	GND	—
8	AY input	Hi - Z	32	Cr Sag compensation	30 kΩ
9	DC shift	Hi - Z	33	Cr output	E. F.
10	AC input	Hi - Z	34	V _{CC}	—
11	Line 1 output	Lo - Z	35	Cb Sag compensation	30 kΩ
12	CPS input	Hi - Z	36	Cb output	E. F.
13	N. C.	—	37	GND	—
14	N. C.	—	38	DY sag compensation	30 kΩ
15	Line 2 output	Lo - Z	39	DY output	E. F.
16	GND	—	40	GND	—
17	I ² C data / ctrl 2 input	Hi - Z	41	N. C.	—
18	I ² C clock / ctrl 2 input	Hi - Z	42	Mute input	Hi - Z
19	Line 3 output	Lo - Z	43	(GND)	—
20	N. C.	—	44	GND	—
21	GND	—	45	Det input	Hi - Z
22	CPS Sag compensation	30 kΩ	46	Mix / CPS input	Hi - Z
23	CPS output	E. F.	47	N. C.	—
24	GND	—	48	N. C.	—

■ Absolute Maximum Ratings

No.	Parameter	Symbol	Rating	Unit	Note
1	Storage temperature	T_{stg}	-55 to +125	°C	*1
2	Operating ambient temperature	T_{opr}	-20 to +70	°C	*1
3	Operating ambient atmospheric pressure	P_{opr}	$1.013 \times 10^5 \pm 0.61 \times 10^5$	Pa	
4	Operating constant gravity	G_{opr}	9 810	m/s ²	
5	Operating shock	S_{opr}	4 900	m/s ²	
6	Supply voltage	V_{CC}	V_{CC} 5.5	V	
7	Supply current	I_{CC}	I_{CC} —	mA	
8	Power dissipation	P_D	468	mW	*2

Note) *1 : Expect for the operating ambient temperature and storage temperature , all ratings are for $T_a = 25^\circ\text{C}$.

Note) *2 : The above power dissipation shows the package dissipation of the IC without heat sink at $T_A = 70^\circ\text{C}$
Refer to the $P_d - T_a$ characteristic curve in page 21.

■ Operating Supply Voltage Range

Operating supply voltage range	V_{CC}	4.75 V to 5.25 V
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