

# 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

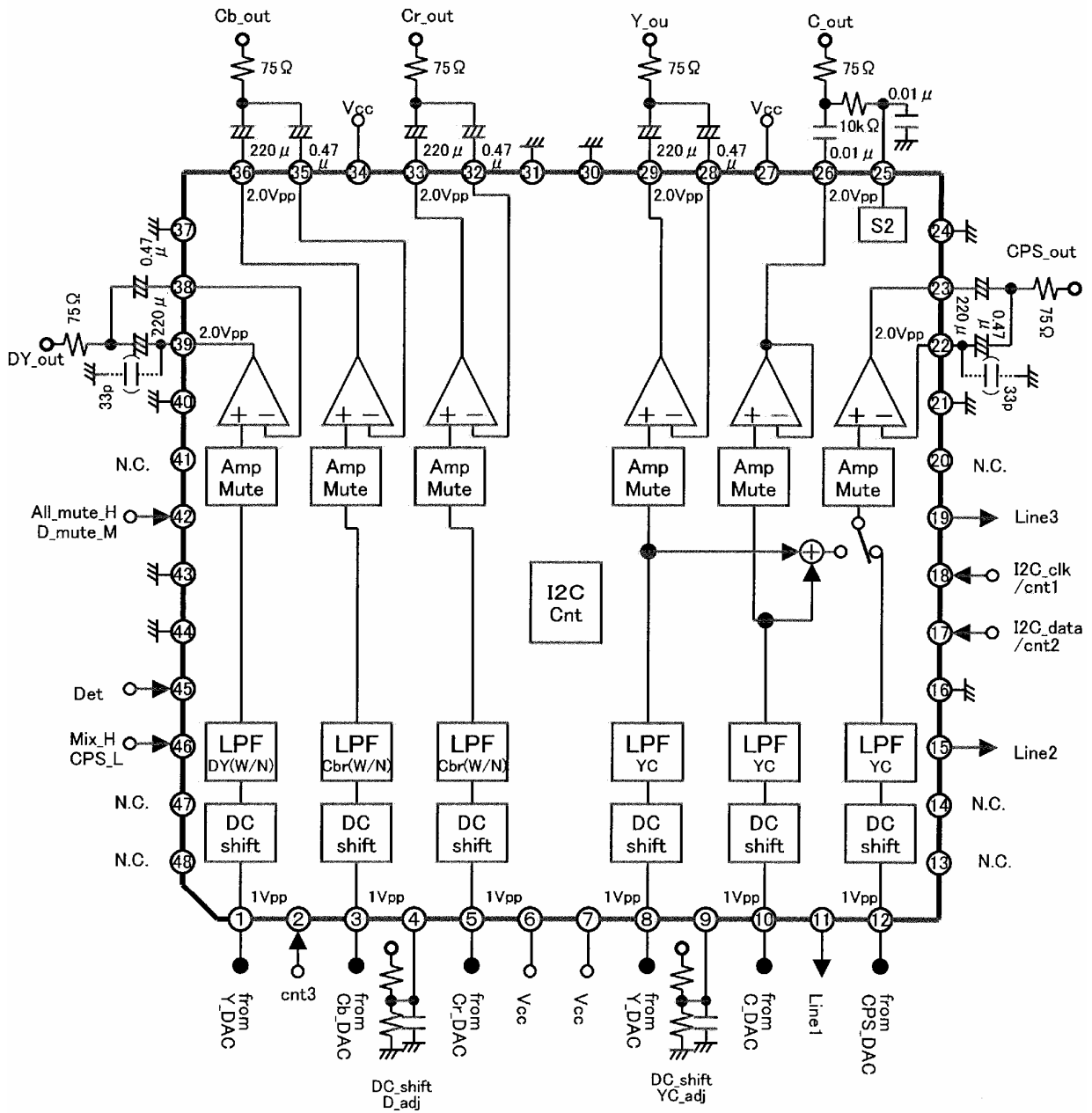
### ■ Applications

- 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 <sub>CC</sub>	—
4	DC shift	Hi - Z	28	AY Sag compensation	30 kΩ
5	Cr input	Hi-Z	29	AY output	E. F.
6	V <sub>CC</sub>	—	30	GND	—
7	V <sub>CC</sub>	—	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 <sub>CC</sub>	—
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 <sup>2</sup> C data / ctrl 2 input	Hi - Z	41	N. C.	—
18	I <sup>2</sup> 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 <sup>2</sup>	
5	Operating shock	$S_{opr}$	4 900	m/s <sup>2</sup>	
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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