DATA SHEET

Part No.	AN5832SA
Package Code No.	SSOP032 - P - 0300AP

SEMICONDUCTOR COMPANY
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

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Contents

AN5832SA

Silicon Monolithic Bipolar IC

■ Features
- Supports both I²C bus and parallel control
- Integrated SIF demodulation
- Fully adjustment - free (when used with SIF input)
  2 adjustment points when used with baseband input
- Integrated voice AGC circuit
- Reduced peripheral component count
- Low power consumption (typ. V_{CC} = 5 V, I_{TOT} = 28 mA)
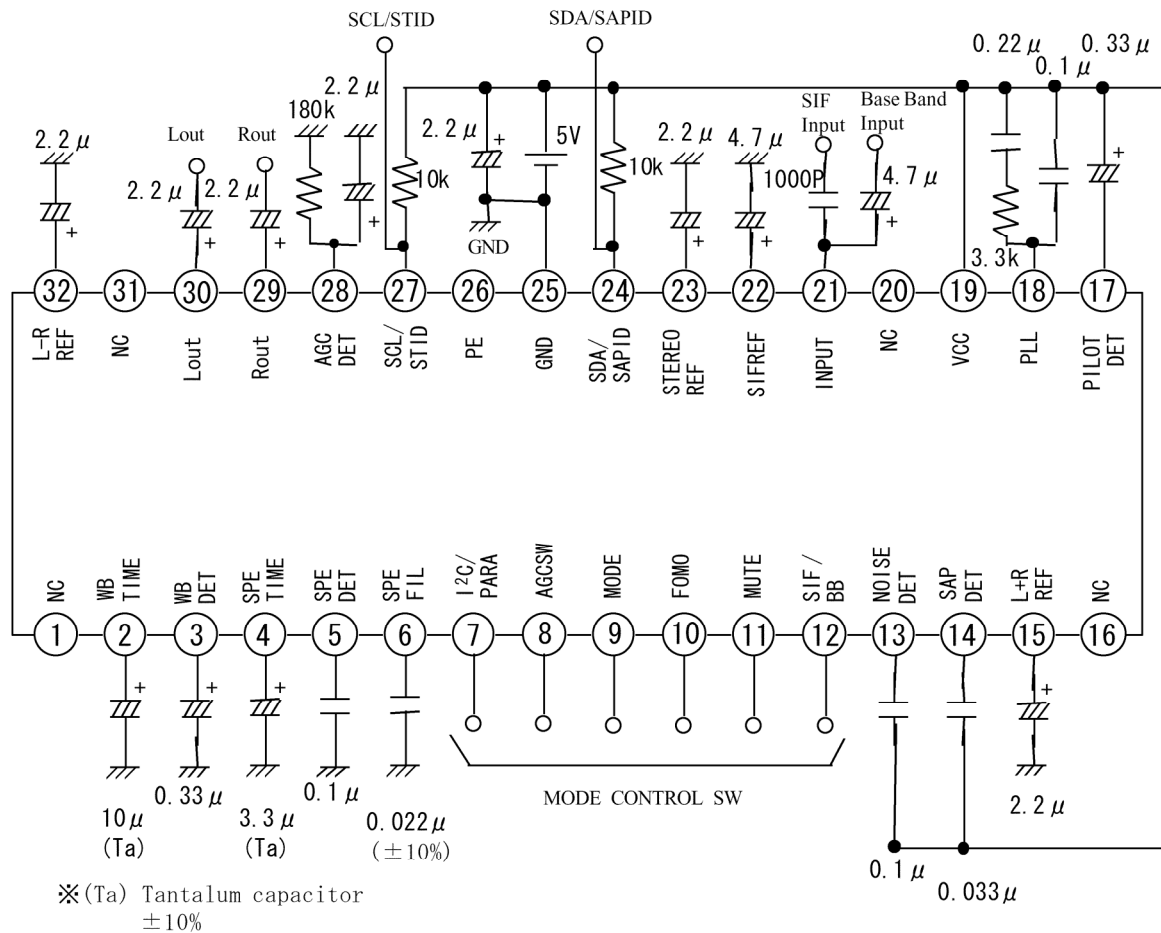- Near pin to pin compatible with AN5833SA (Japanese TV audio multiplex demodulation IC)

■ Applications
- TV sets, VCRs, DVD recorders, PCs, car navigation systems, and similar products for US market

■ Package
- DIL-32PIN Plastic Package (SO Type)

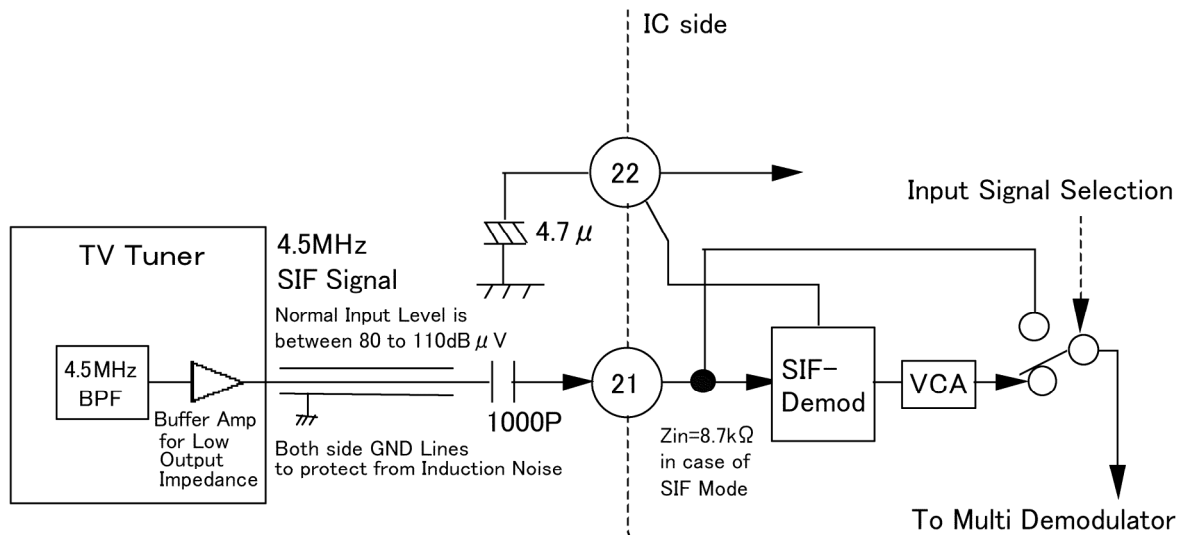■ Application Circuit

< Instructions of Application Circuits >

1) In case of using base band input, ICs were adjusted to perform good separation when input level ismatched
with 100 mV[rms] (= 283 mV[p-p]) on condition of mono 100% mod pre-emphasis OFF.
However, if good enough separation can't be taken in the cause of un-matching frequency characteristic and so in
input signal, it can adjust separation by connecting a volume between #22Pin and GND for adjusting high frequency separation.
If it not need adjusting separation, please open #22Pin.
If it need adjusting low frequency separation also, please adjust the input level volume for taking best separation on low frequency.

2) In case of using SIF input, please set up the SIF input level from tuners between 80 dBμV to 110 dBμV in standard
RF input conditions. Please select SIF - BPFs that group delay of 4.5 MHz ±42 kHz is flat as possible.

3) In measuring characteristics of separation, please use the stereo modulator that perform good characteristic on dbx
encoder and corrected well.
In case of using SIF input, please correct FM modulation band to ±25 kHz exactly at mono 100% mod pre-emphasis
OFF with the 0 carrier method.
And, please use LPFs that reduce 30 kHz signal over 20 dB setting between line-outs and AB level meter
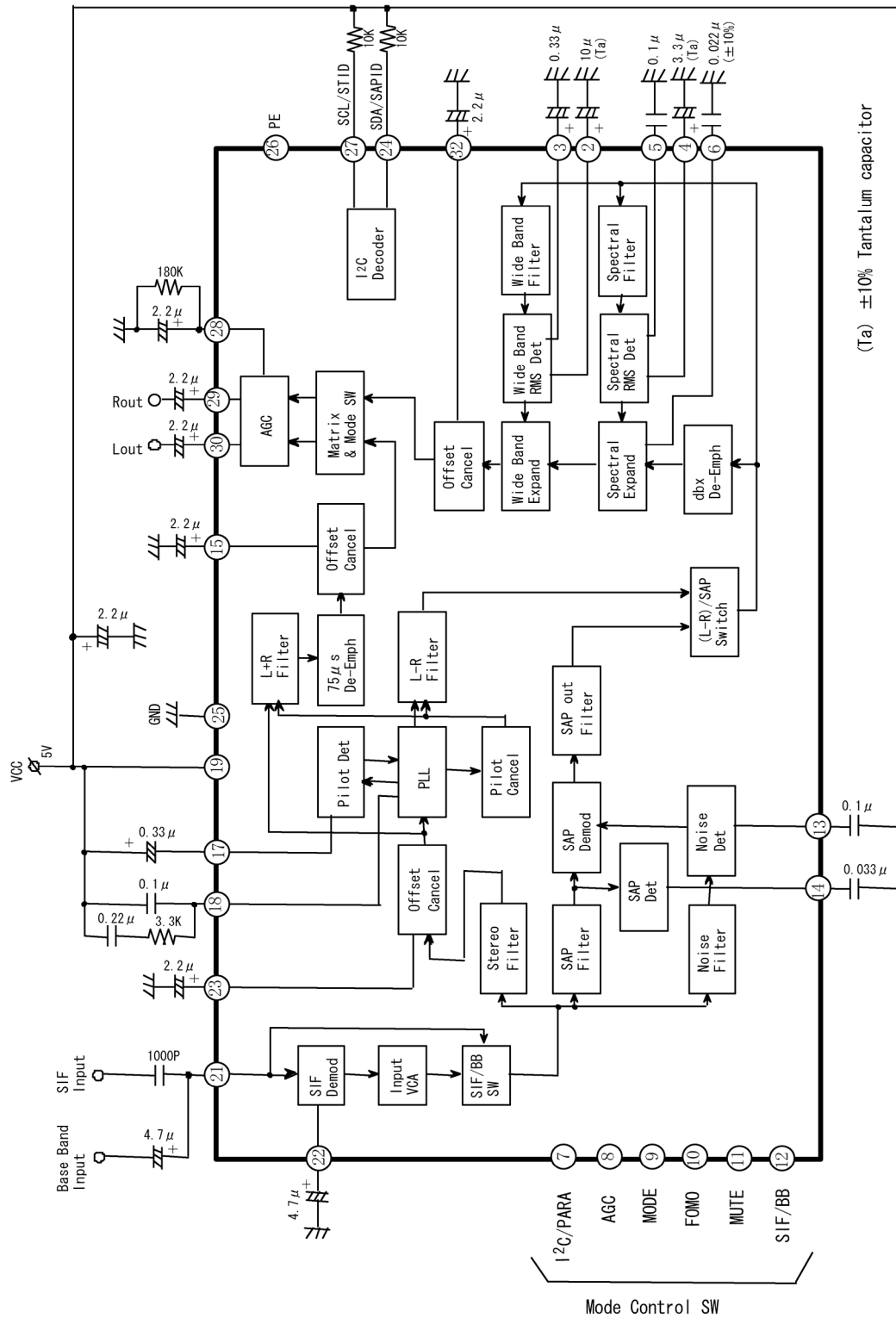
■ Application Circuit (continued)

(1) Example of No Adjustments Application Circuits in case of SIF Input

(2) Example of Adjustments Application Circuits in case of Base Band Input

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■ Block Diagram

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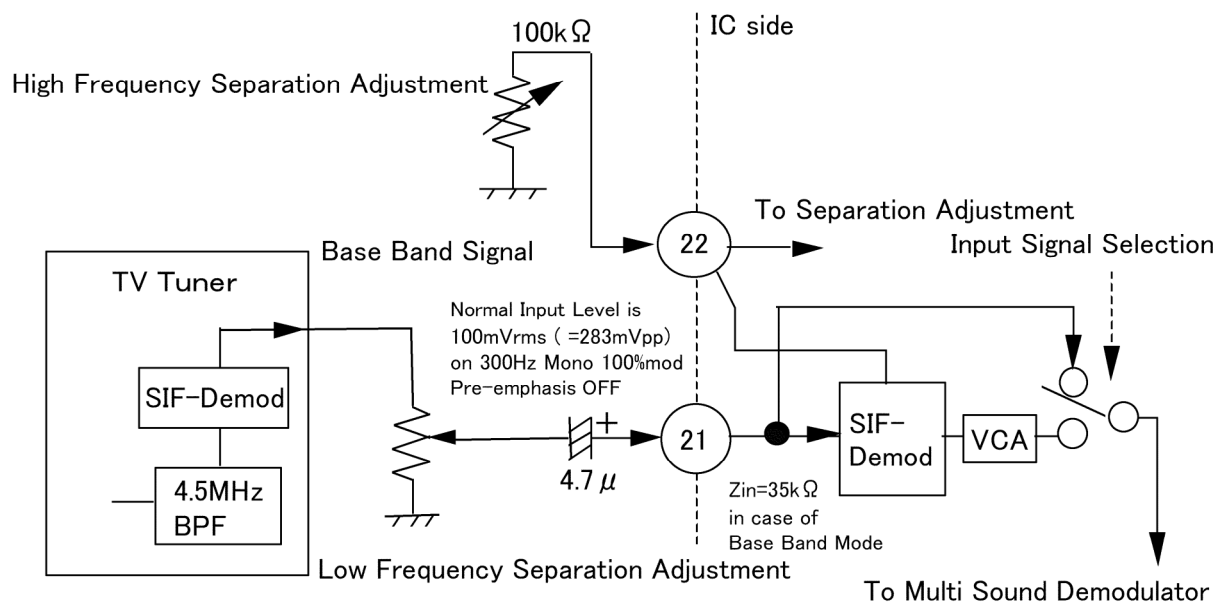
■ Pin Descriptions

Pin No.	Function
1	N. C.
2	Wide band timing
3	Wide band DET
4	Wide band DET
5	Spectral DET
6	Spectral DET
7	I^2C Spectral DET
8	Spectral DET
9	MODE SW
10	Force monaural SW
11	Mute SW
12	SIF / Base band SW
13	SAP Noise DET
14	SAP DET
15	L + R REF
16	N. C.
17	Pilot DET
18	Stereo PLL filter
19	V_{CC}
20	N. C.
21	SIF IN
22	SIF REF
23	STEREO REF
24	SDA / SAPID
25	Ground
26	PE
27	SCL / STID
28	AGC DET
29	Right - channel output
30	Left - channel output
31	N. C.
32	L - R REF

■ 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 +85	°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}	6.0	V	
7	Supply current	I_{CC}	38	mA	
8	Power dissipation	P_D	228	mW	$T_a = 85°C$

Note) *1 : $T_a = 25°C$ except storage temperature, and operating ambient temperature.

　　　 *2 : To use this products including dbx - TV noise reduction need the license agreement with THAT corporation.

■ Operating Supply Voltage Range

Operating supply voltage range	V_{CC}	4.5 V to 5.5 V