

DATA SHEET

Part No.	AN18165B
Package Code No.	SSOP024-P-0300E

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AN18165B

FM-MPX demodulation / FM noise canceller for car radio

■ Overview

AN18165B is an IC for FM-MPX demodulation for car radio and FM noise canceller.

This IC is able to adjust and change over various function by I²C-bus, and built-in VCO reduces the number of parts.

■ Features

- I²C-bus control
- FM-MPX demodulation
- Built-in FM noise canceller (PNL)
- Built-in VCO(No cellalock required)

■ Applications

- Car radio

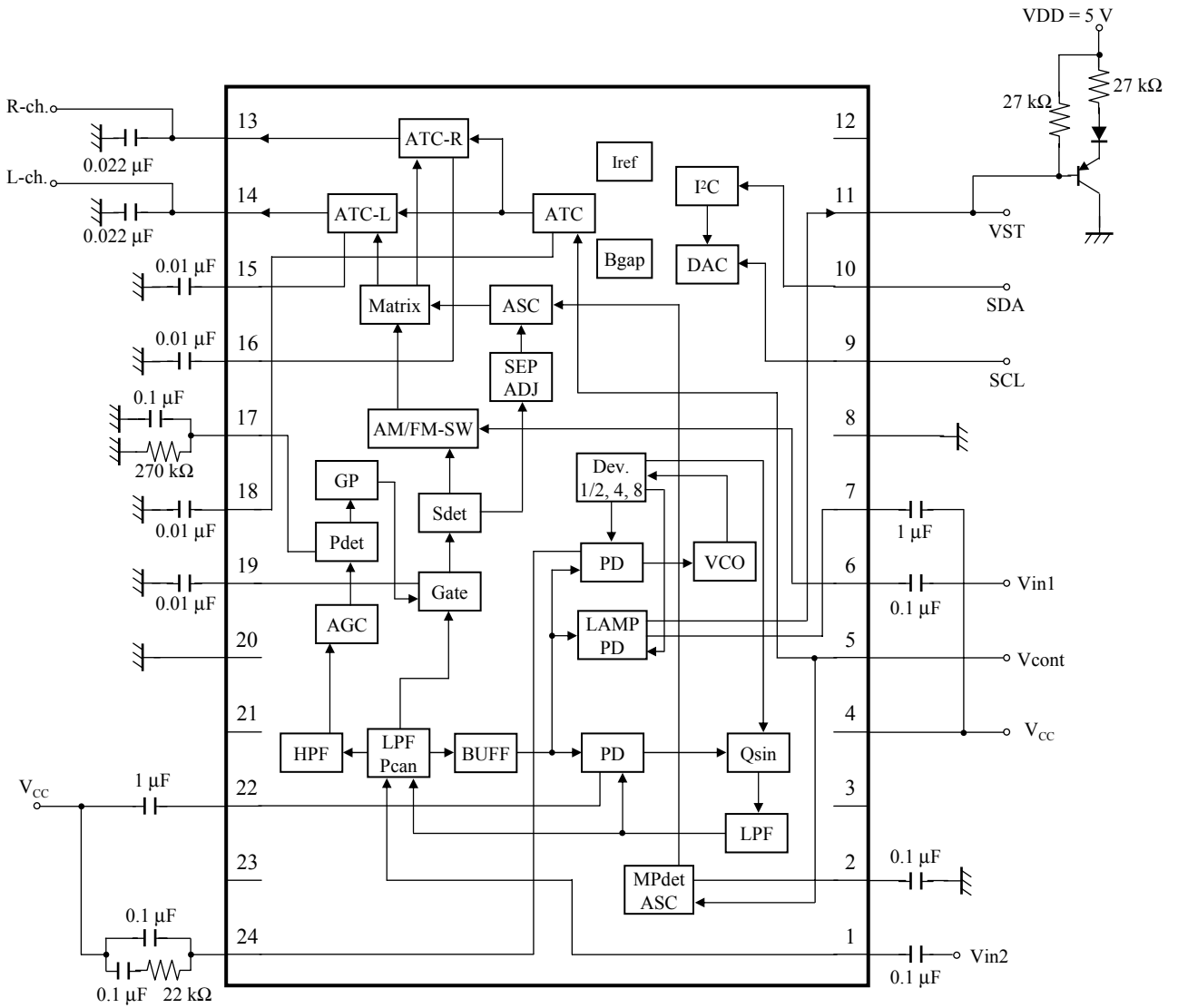
■ Package

- 24 pin plastic shrink small outline package (SSOP Type)

■ Type

- Silicon monolithic bipolar IC

■ Application Circuit Example / Block Diagram



■ Pin Descriptions

Pin No.	Pin name	Type	Description
1	FMIN	Input	FM input
2	ASCTC	—	ASC time constant
3	N.C.	—	Non connected
4	VCC	Power supply	V _{CC}
5	VCONTIN	Input	FM Control voltage input
6	AMIN	Input	AM input
7	PDLPF	—	Pilot detection low-pass filter
8	VSS	Ground	VSS (Logic-GND)
9	SCL	Input	SCL
10	SDA	Input	SDA
11	STIND	Output	Stereo indicator
12	N.C.	—	Non connected
13	ROUT	Output	R-ch. output
14	LOUT	Output	L-ch. output
15	LATCLPF	—	L-ch. FM-ATC low-pass filter
16	RATCLPF	—	R-ch. FM-ATC low-pass filter
17	PNLAGC	Output	PNL AGC
18	FMATCTC	—	FM-ATC time constant
19	PNLHOLD	Output	PNL output hold
20	GND	Ground	Ground
21	N.C.	—	Non connected
22	PCLPF	—	Pilot cancellation control low-pass filter
23	N.C.	—	Non connected
24	PLLLPF	—	PLL low-pass filter

■ Absolute Maximum Ratings

A No.	Parameter	Symbol	Rating	Unit	Notes
1	Supply voltage	V_{CC}	9.1	V	*1
2	Supply current	I_{CC}	28	mA	—
3	Power dissipation	P_D	156	mW	*2
4	Operating ambient temperature	T_{opr}	-40 to +85	°C	*3
5	Storage temperature	T_{stg}	-55 to +125	°C	*3

Notes) *1: The values under the condition not exceeding the above absolute maximum ratings and the power dissipation.

*2: The power dissipation shown is the value at $T_a = 85^\circ\text{C}$ for the independent (unmounted) IC package without a heat sink.

*3: Except for the power dissipation, operating ambient temperature, and storage temperature, all ratings are for $T_a = 25^\circ\text{C}$.

■ Operating supply voltage range

Parameter	Symbol	Range	Unit	Notes
Supply voltage range	V_{CC}	7.2 to 9.0	V	*

Note) *: The values under the condition not exceeding the above absolute maximum ratings and the power dissipation.

■ Allowable Voltage Ranges

Pin No.	Pin name	Range	Unit	Notes
4	V_{CC}	0 to 9.0	V	—
5	VCONTIN	0 to 5.5	V	—
9	SCL	0 to 5.5	V	—
10	SDA	0 to 5.5	V	—
11	STIND	0 to 5.5	V	—

Note) 1. The ranges on the list are the voltages of respective pins in relation to GND.

The GND represents the voltage of GND and VSS. And $GND=VSS$.

2. Do not apply the voltages or the currents from external into the pins which are not on the list.

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