

DATA SHEET

Part No.	AN29000A
Package Code No.	QFP056-9-1010B

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AN29000A

Silicon Monolithic Bi - CMOS IC

■ Features

- IF - AMP1, IF - AMP2, DET, NOISE-SQ, RSSI, DATA - AMP, BATT - LOW, COMPANDER, SP - AMP, Half-Mute, OSC, PRESCALER, PROGRAMMABLE - COUNTER, Pre - AMP, Vol Control, Power Down, Splatter - Filter

■ Applications

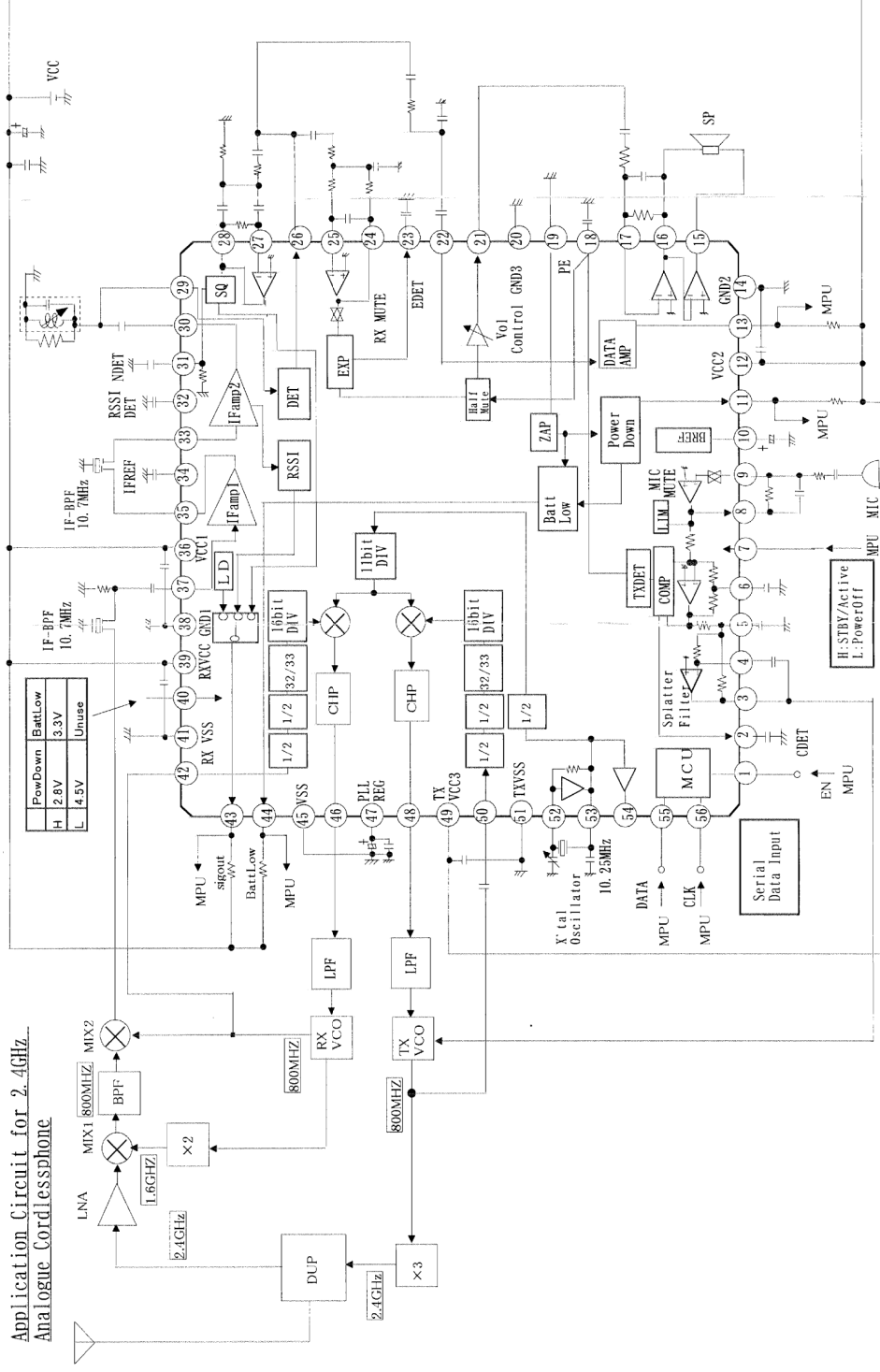
- IC for Cordless Telephone (IF + COMPANDER + PLL)

■ Package

- Quad 56 pin Plastic Package

■ Application Circuit

Application Circuit for 2.4GHz
Analogue Cordlessphone



■ Pin Descriptions

Pin No.	Pin Description		Pin No.	Pin Description	
1	EN	Enable input	29	DET-IN	FM detector input
2	C-DET	COMP detection	30	IF2-OUT	IFamp2 output
3	SF-OUT	Splatter filter output	31	N-DET	Noise detection
4	SFC2	External splatter filter	32	RSSI-DET	RSSI detection
5	SFC1	COMP output	33	IF2-IN	IFamp2input
6	COMP-DC	COMP output V_{REF}	34	IF2- V_{REF}	IFamp2 V_{REF}
7	POFF	Power down input	35	IF1-OUT	IFamp1 output
8	MIC-OUT	Microphone amp output	36	V_{CC1}	V_{CC1}
9	MIC-IN	Microphone amp input	37	IF1-IN	IFamp1 input
10	BREF	Audio system reference output	38	GND1	Ground 1
11	PD-OUT	Power down output	39	RXV_{CC}	RX-counter V_{CC}
12	V_{CC2}	V_{CC2}	40	PDL	BL, PD threshold selection
13	DOUT	Data amp output	41	RXGND	RX-counter Gnd
14	GND2	Ground 2	42	FINR	RX-counter input
15	BTL	SP amp output 1	43	SIG-OUT	LD, RSSI, ND output
16	SP-OUT	SP amp output 2	44	Batt-Low	Battery low output
17	SP-IN	SP amp input	45	V_{SS}	Logic Gnd
18	TXDET	Half-mute detection	46	RX-PD	RX-phase comparator output
19	PE	ZAP write	47	PLLREG	Logic power source output
20	GND3	Ground 3	48	TX-PD	TX-phase comparator output
21	EXPOUT	EXP output	49	TXV_{CC}	TX-counter V_{CC}
22	DIN	Data amp input	50	FINT	TX-counter input
23	EDET	EXP detection	51	TXGND	TX-counter Gnd
24	PreAMP-OUT	Pre-amp output	52	OSCI	Crystal oscillator input
25	PreAMP-IN	Pre-amp input	53	OSCO1	Crystal oscillator output1
26	DET-OUT	FM detection output	54	OSCO2	Crystal oscillator output2
27	NFIN	Noise filter input	55	DATA	Serial data input
28	NFOUT	Noise filter output	56	CLK	Clock input

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 +75	°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	$V_{\text{CC1}}, V_{\text{CC2}},$ $RxV_{\text{CC}}, TxV_{\text{CC}}$	6.5	V	*2
7	Supply current	I_{CC}	30	mA	*3
8	Power dissipation	P_D	195	mW	

Note) *1 : $T_a = 25^\circ\text{C}$ except storage temperature and operating ambient temperature.

*2 : Power supply terminal (V_{CC1} (pin 36) , V_{CC2} (pin 12) , RxV_{CC} (pin 39) , TxV_{CC} (pin 49)) should be supplied with same supply voltage.

*3 : I_{CC} is define as total current consumption at above four power supply terminal.

Operating Supply Voltage Range

Operating supply voltage range	$V_{\text{CC1}}, V_{\text{CC2}}, RxV_{\text{CC}}, TxV_{\text{CC}}$	2.7 V to 5.5 V
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