

Key Features and Benefits

- Pre-Fit Audiology Parameters –

- Adaptive Noise Reduction (The adaptive noise reduction algorithm monitors signal and noise a

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Table 2. ELECTRICAL CHARACTERISTICS (Supply Voltage $V_B = 1.25\text{ V}$; Temperature = 25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Hybrid Current	IAMP	All functions, trimmers at default	-	550	-	μA
Minimum Operating Supply Voltage	VBOFF	Ramp down, audio path	0.93	0.95	0.97	V
		Ramp down, control logic	0.77	0.80	0.83	
Supply Voltage Turn On Threshold	VBON	Ramp up	1.06	1.10	1.16	V
Low Frequency System Limit	-	-	-	125	-	Hz
High Frequency System Limit	-	-	-	18	-	kHz
Total Harmonic Distortion	THD	$V_{IN} = -40\text{ dBV}$	-	-	-	-

Time - - - - - 3010 -

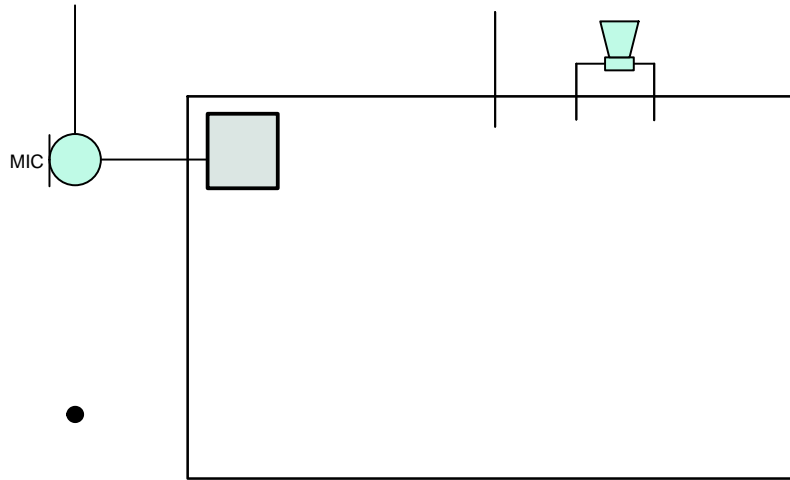
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Table 3. PIN CONNECTIONS

Pin Number	Pin Name	Signal Description	A/D/P	I/O	Active	Pull
1	MIC	Front microphone input	A	I		
2	MGND	Microphone ground	P	I		
3	GND	Ground	P	I		
4	PGND	Receiver ground	P	I		
5	OUT+	Receiver positive output	A	O		
6	OUT-	Receiver negative output	A	O		
7	VBP	H-bridge power supply	P	I		
8	VB	Main power supply	P	I		
9	MS	Mode select	D	I	RE	PD
10	TC-EN	Telecoil enable	D			

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TYPICAL APPLICATION



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FUNCTIONAL BLOCK DESCRIPTION

Analog Input and Output Stages

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Channel Processing



Figure 4. Wide Dynamic Range Compression

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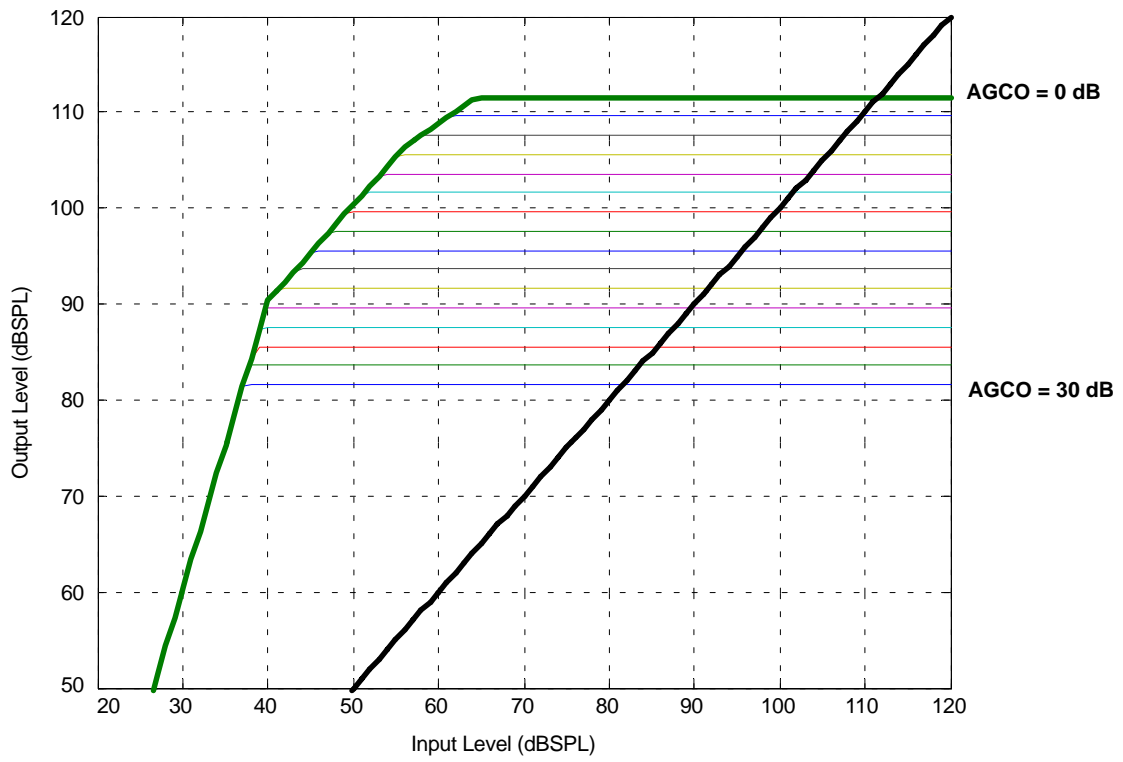


Figure 5. Controlling the Output Limiter (AGC-O)

Adaptive Noise Reduction

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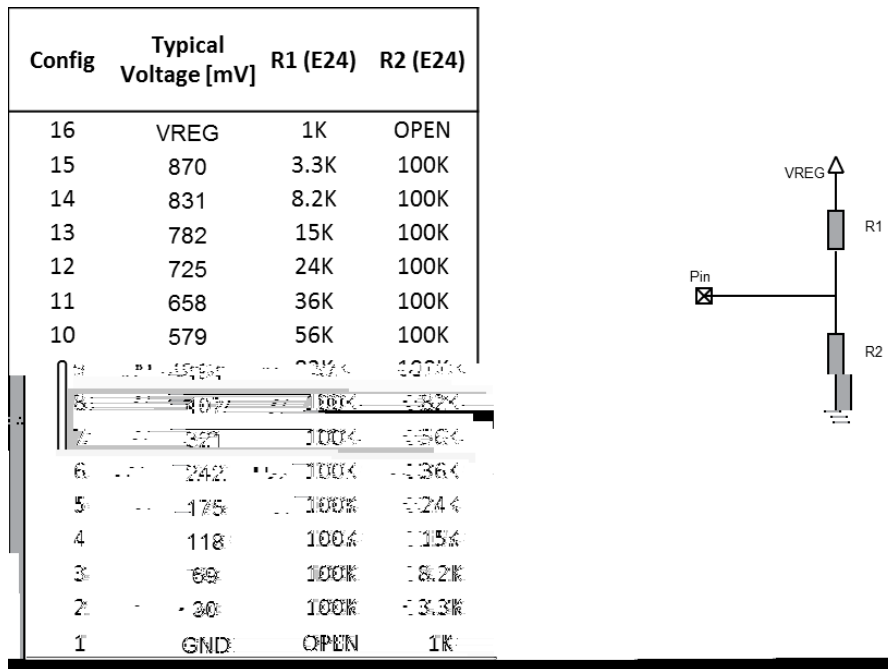


Figure 6. 16 Configurations and their Resistor Values

Table 4. PARAMETER VALUES AND RANGES

Pin Name:	LC	HC	WG/NL	WG/NL	AGCO
TN-EN	X	X	0	1	X
Parameter Description:	Low-Cut Filter Corner Frequency	High-Cut Filter Corner Frequency			

Test Mode

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ORDERING INFORMATION

Device	Marking	Package	Shipping†
R3110-CBAA-E1T	R3110-E1	21 Pad Hybrid	250 Units / Tape & Reel

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification Brochure, BRD8011/D.

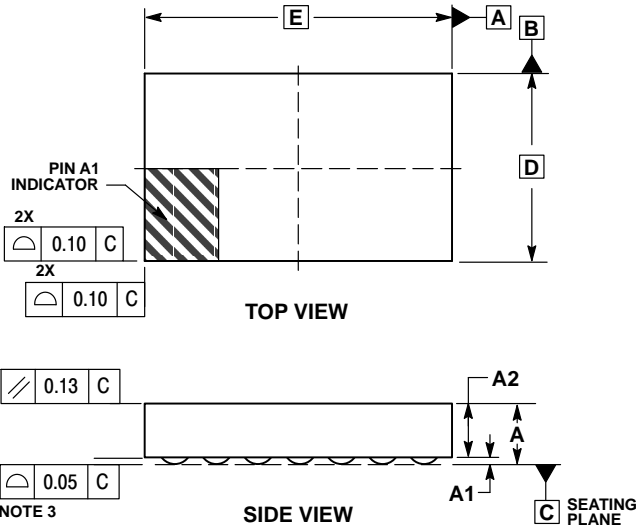
Hybrid Jig Ordering Information



SCALE 2:1

SIP21, 3.10x5.08
CASE 127DF
ISSUE O

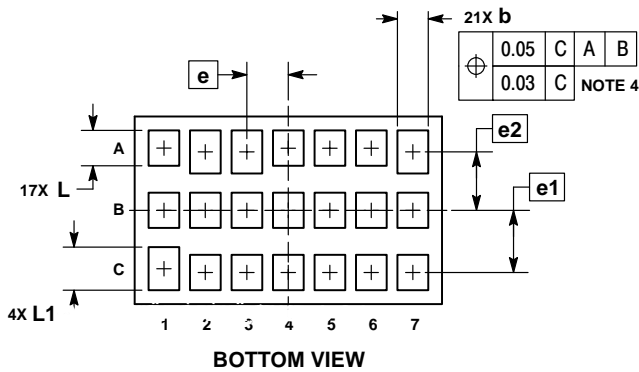
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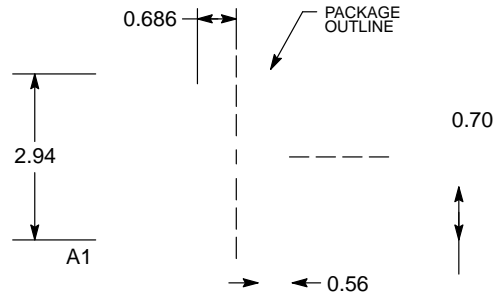
NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. COPLANARITY APPLIES TO THE SPHERICAL CROWNS OF THE SOLDER BALLS.
4. DIMENSIONS b, L, AND L1 ARE MEASURED AT THE SURFACE OF THE PACKAGE BODY.

DIM	MILLIMETERS	
	MIN	MAX
A	---	1.14
A1	0.07	0.17
A2	0.889	REF
b	0.470	0.546
D	3.100	BSC
E	5.080	BSC
e	0.686	BSC
e1	1.029	BSC
e2	0.965	BSC
L	0.546	0.622
L1	0.673	0.749



RECOMMENDED SOLDERING FOOTPRINT*



DIMENSIONS: MILLIMETERS

*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

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