



DIO2115

Ultra Low THD Audio Line Driver with Adjustable Gain

Features

- Qualified power output capability
- 2Vrms output with 10KΩ load
- Ultra Low Distortion
 - SNR>100dB
 - Typical $V_n < 10\mu\text{Vrms}$
 - THD+N<0.001% at 2Vrms
- No Pop/Clicks Noise when Power ON/OFF
- Optimized Frequency Response between 20Hz–20kHz
- Accepting Differential Input
- Featuring external under voltage mute
- Available in TSSOP-14 and DQFN-16 package

Applications

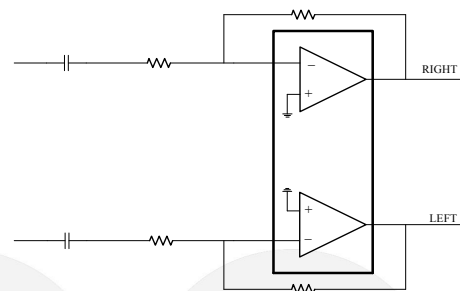
- Flat Panel Display
- High Definition DVD Players
- MID
- STB

Descriptions

The DIO2115 is specially designed for flat panel TV, high definition DVD players and MID applications to optimize the audio driver circuit performance while reducing the BOM cost by eliminating the peripheral discrete components. DIO2115 features qualified power output capability under 32Ω load and more than 2Vrms stereo audio output swing under 10KΩ load with no need of AC coupling capacitors at output ports.

Featuring differential input mode, gain range of $\pm 1\text{V/V}$ to $\pm 10\text{V/V}$ can be achieved via external gain resistor setting. Meanwhile, the DIO2115 offers built-in power-on and shut-down control circuitry for optimal pop-free performance during power-ON and power-OFF conditions.

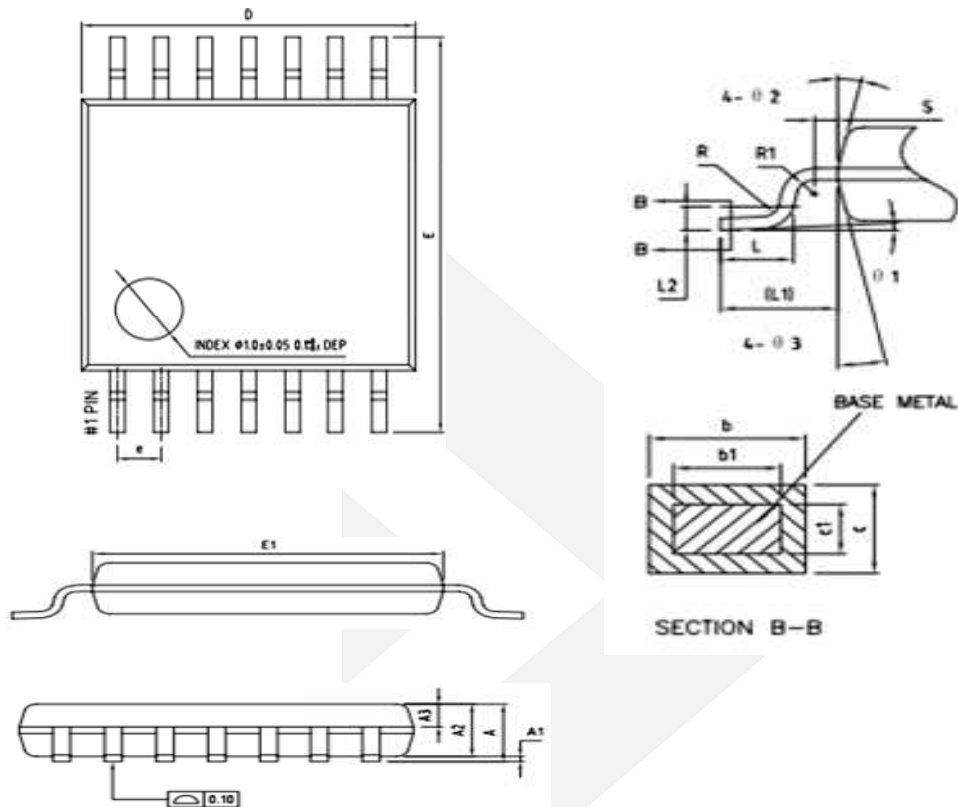
Block Diagram



Ordering Information

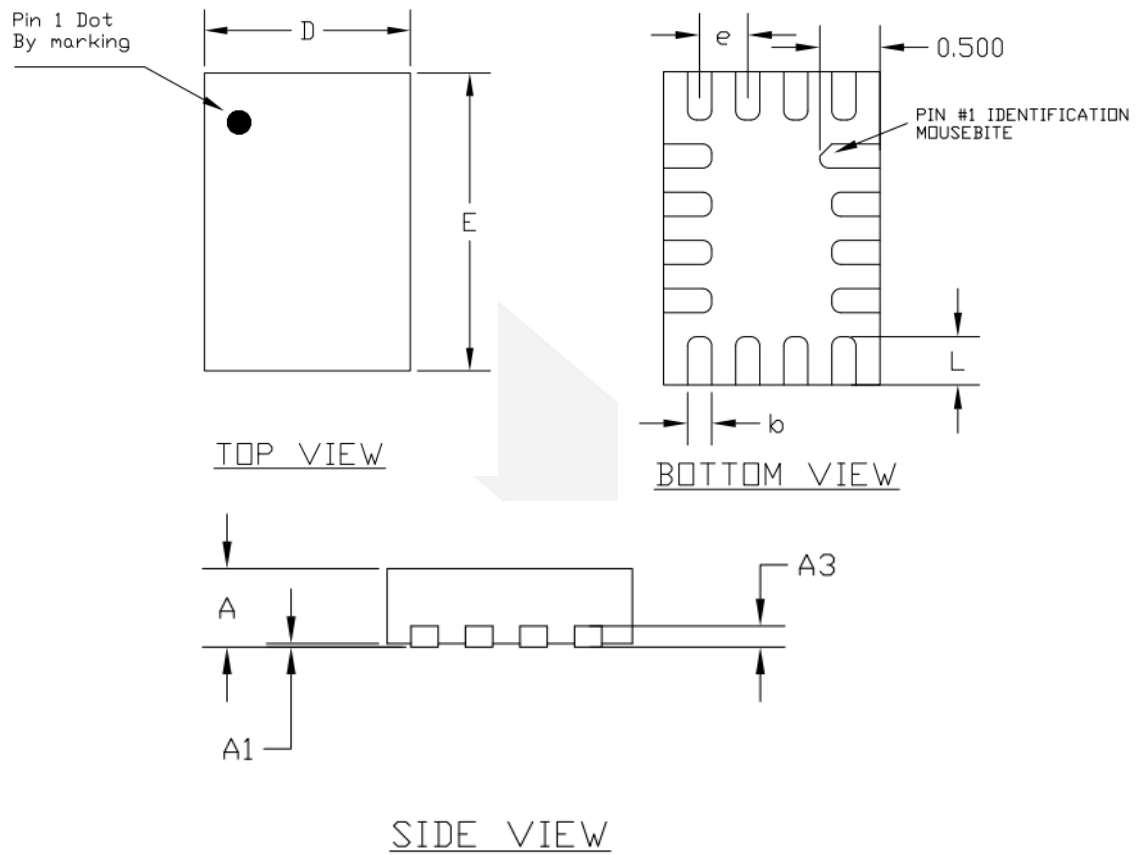
Order Part Number	Top Marking		T_A	Package	
DIO2115CT14	DIO2115	Green/RoHS	-40 to +85°C	TSSOP-14	Tape & Reel, 2500
DIO2115LN16	D21	Green	-40 to +85°C	DQFN-16	Tape & Reel, 3000

Physical Dimensions: TSSOP-14



Symbol	Dimensions In Millimeters			
	Min	Nom	Max	
A	-	-	1.20	
A1	0.05	-	0.15	
A2	0.90	1.00	1.05	
A3	0.34	0.44	0.54	
b	0.20	-	0.28	
b1	0.20	0.22	0.24	
c	0.10	-	0.19	
c1	0.10	0.13	0.15	
D	4.86	4.96	5.06	
E	6.20	6.40	6.60	
E1	4.30	4.40	4.50	
e	0.65BSC			
L	0.45	0.60	0.75	
L1	1.00REF			
L2	0.25BSC			
R	0.09	-	-	
R1	0.09	-	-	
S	0.20	-	-	
θ 1	0°	-	8°	
θ 2	10°	12°	14°	
θ 3	10°	12°	14°	

Physical Dimensions:DQFN-16



COMMON DIMENSIONS(MM)			
PKG.	UT: ULTRA THIN		
REF.	MIN.	NOM	MAX
A	>0.50	0.55	0.60
A1	0.00	-	0.05
A3	0.15 REF.		
D	1.75	1.80	1.85
E	2.55	2.60	2.65
L	0.35	0.40	0.45
b	0.15	0.20	0.25
e	0.40 BSC		



DIO2115

CONTACT US

Dioo is a professional design and sales corporation for high-quality and performance analog semiconductors. The company focuses on industry markets, such as, cell phone, handheld products, laptop, and medical equipments and so on. Dioo's product families include analog signal processing and amplifying, LED drivers and charger IC. Go to <http://www.dioo.com> for a complete list of Dioo product families.

For additional product information, or full datasheet, please contact with our Sales Department or Representatives.

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Mouser Electronics

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DIOO:

DIO2115CT14