



RE46C101

Piezoelectric Horn Driver and LED Driver Circuit

Product Specification

General Description

This product is intended for applications using a self oscillating piezoelectric horn although it can be used in direct drive applications. Feedback control and a driver circuit are provided as well as a horn enable function. The design also provides an open drain N-channel driver suitable for use with a light emitting diode.

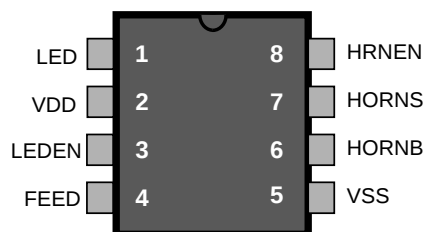
Applications

Smoke detectors
CO Detectors
Personal Security Products
Electronic Toys

Features

- Low Quiescent Current (<100na)
- Low Driver Ron - 20 Ω typical at 9V
- Wide Operating Voltage Range
- 8 Pin DIP and SO Packages
- Available in Standard Packaging or RoHS Compliant Pb Free Packaging

Pin Configuration



ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNITS
Supply Voltage	V_{DD}	18	V
Input Voltage Range Except FEED	V_{in}	-.3 to $V_{dd} + .3$	V
FEED Input Voltage Range	V_{infd}	-10 to +22	V
Input Current except FEED	I_{in}	10	mA
Operating Temperature	T_A	0 to 50	°C
Storage Temperature	T_{STG}	-55 to 125	°C
Maximum Junction Temperature	T_J	150	°C

Stresses beyond those listed under Absolute Maximum Ratings may cause permanent damage to the device. These are stress ratings only and operation at these conditions for extended periods may affect device reliability.

This product utilizes CMOS technology with static protection; however proper ESD prevention procedures should be used when handling this product. Damage can occur when exposed to extremely high static electrical charge.

RE46C101

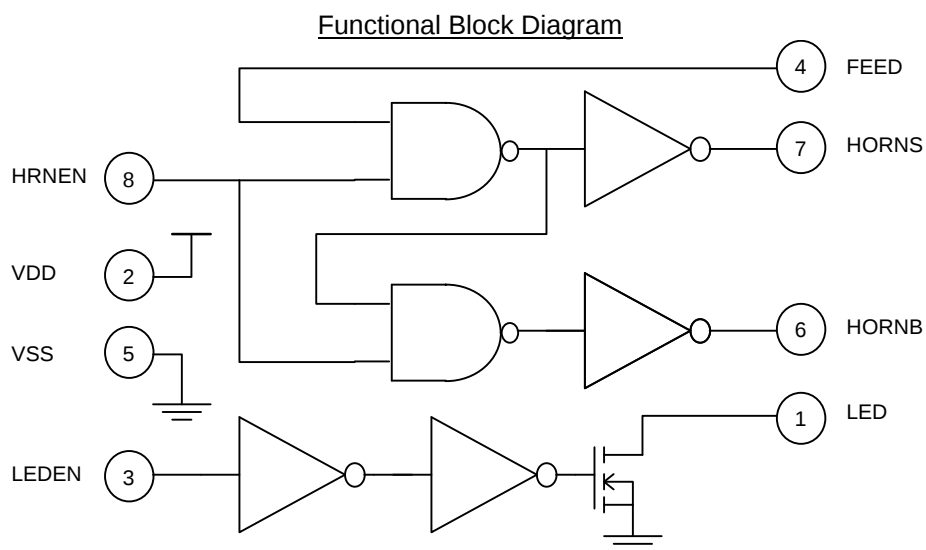
Piezoelectric Horn Driver and LED Driver Circuit
Product Specification



R&E International
A Subsidiary of Microchip Technology Inc.

DC Electrical Characteristics at TA = 25°C, VDD=9V, Typical Application (unless otherwise noted)

Parameter	Symbol	Test Pin	Test Conditions	Limits			
				Min	Typ	Max	Units
Supply Voltage	V _{DD}	2	Operating	6	9	16	V
Supply Current	I _{DD1}	2	HRNEN,LEDEN and FEED=0V			100	nA
Input Voltage Low	V _{IL1}	3,8				1	V
Input Voltage High	V _{IH1}	3,8		2.3			V
Input Leakage Low	I _{IL1}	3,8	Vin=VSS			-100	nA
	I _{LFD}	4	FEED=-10V			-50	uA
Input Leakage High	I _{IH1}	3.8	Vin=VDD			100	nA
	I _{HFD}	4	FEED=22V			50	uA
Output Voltage Low	V _{OL1}	6,7	I _{ol} =16mA		.3	.5	V
	V _{OL2}	6,7	I _{ol} =16mA, VDD=7.2V			.9	V
	V _{OL3}	1	I _{ol} =10mA, VDD=7.2V		.5	1	V
Output Voltage High	V _{Oh1}	6,7	I _{oh} =-16mA	8.5	8.7		V
	V _{Oh2}	6,7	I _{oh} =-16mA, VDD=7.2V	6.3			V



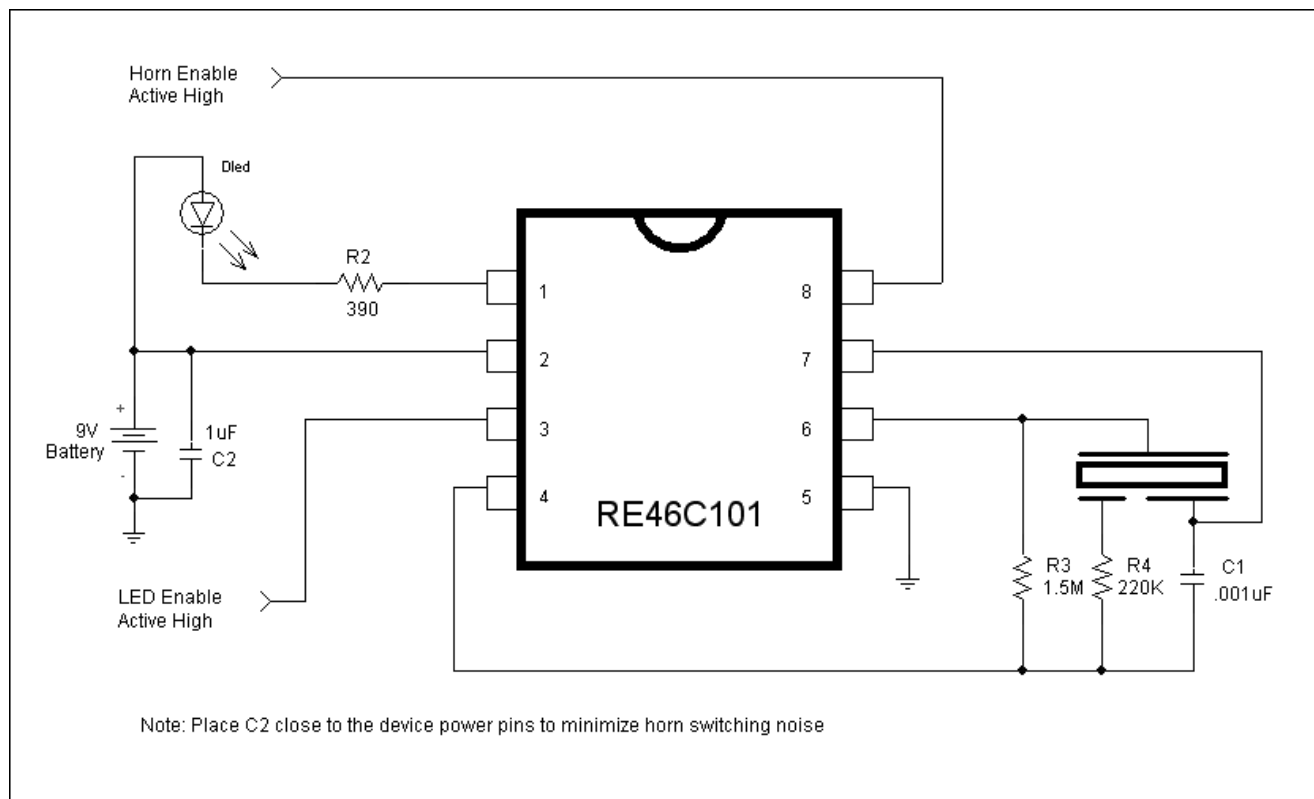
RE46C101

Piezoelectric Horn Driver and LED Driver Circuit
Product Specification



R&E International
A Subsidiary of Microchip Technology Inc.

Typical Application



RE46C101

Piezoelectric Horn Driver and LED Driver Circuit Product Specification



R&E International

A Subsidiary of Microchip Technology Inc.

Information contained in this publication regarding device applications and the like is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that your application meets with your specifications. MICROCHIP MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, STATUTORY OR OTHERWISE, RELATED TO THE INFORMATION, INCLUDING BUT NOT LIMITED TO ITS CONDITION, QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR PURPOSE. Microchip disclaims all liability arising from this information and its use. Use of Microchip devices in life support and/or safety applications is entirely at the buyer's risk, and the buyer agrees to defend, indemnify and hold harmless Microchip from any and all damages, claims, suits, or expenses resulting from such use. No licenses are conveyed, implicitly or otherwise, under any Microchip intellectual property rights.

Trademarks

The Microchip name and logo, the Microchip logo, Accuron, dsPIC, KEELOQ, KEELOQ logo, MPLAB, PIC, PICmicro, PICSTART, rfPIC, SmartShunt and UNI/O are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

FilterLab, Hampshire, Linear Active Thermistor, MXDEV, MXLAB, SEEVAL, SmartSensor and The Embedded Control Solutions Company are registered trademarks of Microchip Technology Incorporated in the U.S.A.

Analog-for-the-Digital Age, Application Maestro, CodeGuard, dsPICDEM, dsPICDEM.net, dsPICworks, dsSPEAK, ECAN, ECONOMONITOR, FanSense, In-Circuit Serial Programming, ICSP, ICEPIC, Mindi, MiWi, MPASM, MPLAB Certified logo, MPLIB, MPLINK, mTouch, nanoWatt XLP, PICkit, PICDEM, PICDEM.net, PICTail, PIC³² logo, PowerCal, PowerInfo, PowerMate, PowerTool, REAL ICE, rfLAB, Select Mode, Total Endurance, TSHARC, WiperLock and ZENA are trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

SQTP is a service mark of Microchip Technology Incorporated in the U.S.A.

All other trademarks mentioned herein are property of their respective companies.

© 2009, Microchip Technology Incorporated, Printed in the U.S.A., All Rights Reserved.

 Printed on recycled paper.

**QUALITY MANAGEMENT SYSTEM
CERTIFIED BY DNV
== ISO/TS 16949:2002 ==**

Microchip received ISO/TS-16949:2002 certification for its worldwide headquarters, design and wafer fabrication facilities in Chandler and Tempe, Arizona; Gresham, Oregon and design centers in California and India. The Company's quality system processes and procedures are for its PIC® MCUs and dsPIC® DSCs, KEELOQ® code hopping devices, Serial EEPROMs, microperipherals, nonvolatile memory and analog products. In addition, Microchip's quality system for the design and manufacture of development systems is ISO 9001:2000 certified.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9