

## FEATURES

- 5V SUPPLY VOLTAGE
- RECEIVE DMX512 SIGNAL
- 48 PWM OUTPUTS
- 256 STEPS FOR EACH OUTPUT
- Auto Adressing DMX
- PACKAGE: TQFP64 (RoHS compliant)



## APPLICATIONS

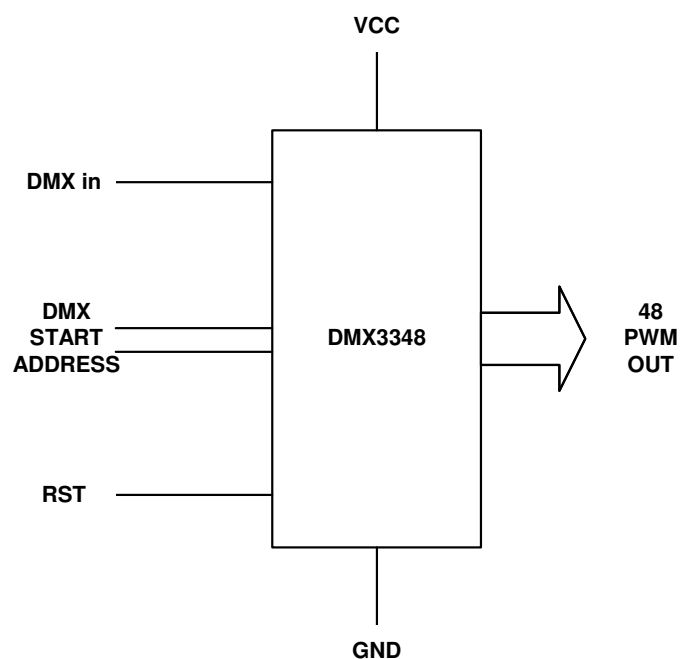
- RGB applications
- RGBW applications
- Single color applications

## DESCRIPTION

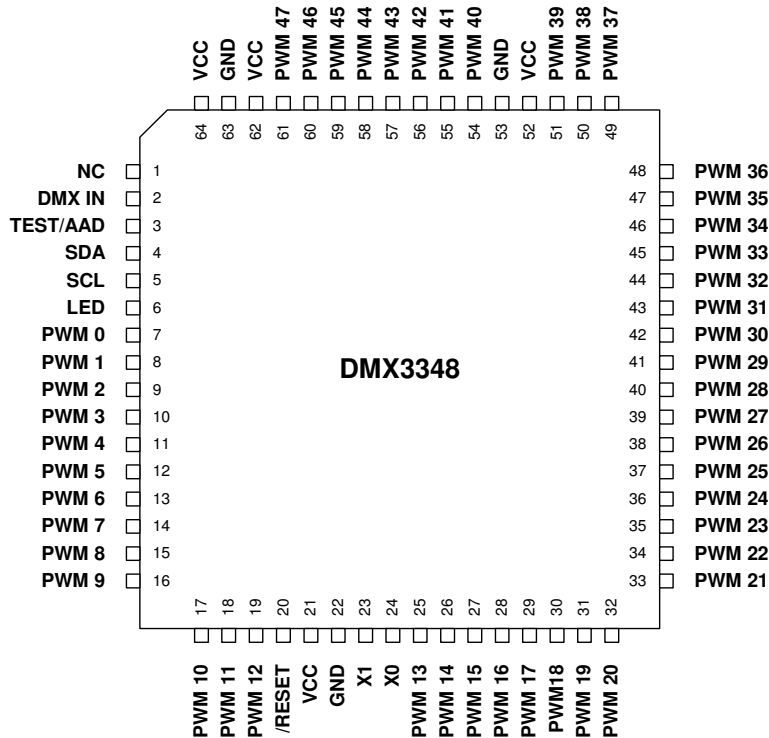
The DMX3348 is a DMX512 receiver with 48 PWM outputs. Each channel is controlled by a DMX channel with 256 steps.

For setting the DMX start address a PCF8574 is used. If no PCF8574 is connected to the device, the first 48 channels are received. The address of output 1 is that determined from the address setting, the address for output 2 is the base address plus1 etc.

## LOGIC SYMBOL



# PIN CONFIGURATION



# PIN DESCRIPTION

MNEMONIC	PIN (TQFP64)	TYPE	NAME AND FUNCTION
RST	20	I	<b>RESET</b> Reset input. A low level on this pin for more then 50ns will generate a reset, even if the clock is not running.
DMX IN	2	I	<b>DMX-SIGNAL</b> Input for the DMX512 signal
SDA	4	I/O	<b>SERIAL DATA</b> Two wire interface data to get the DMX start address
SCL	5	O	<b>SERIAL CLOCK</b> Two wire interface clock to get the DMX start address
VCC	21;52;62;64	I	<b>POWER</b> This is the power supply
GND	22;53;63	I	<b>GROUND</b> 0V reference
X0	24	I	<b>X0</b> Input from the inverting oscillator amplifier
X1	23	O	<b>X1</b> Output from the inverting oscillator amplifier
TEST/AAD	3	I	<b>TEST/AAD</b> A LOW on this pin on power up enable the test mode In normal mode this pin is the AAD output
LED	6	O	<b>STATUS LED</b> LED output. This pin can sink 20mA to drive a LED
PWM0-47	see pin configuration	O	<b>DIGITAL PWM OUTPUT</b> Output for the PWM signal controlled by DMX value

## ELECTRICAL CHARACTERISTICS

Parameter	Description	Min	Typ	Max	Units	Conditions
VCC	Operating Supply Voltage	3,5	5	5,5	V	
ICC	Operating Supply Current				mA	
VIH1	Input High Voltage	0,6		VCC+0,5	V	
VIH2	Input High Voltage	0,9		VCC+0,5	V	RESET Pin
VIL	Input Low Voltage	-0,5		0,2	V	
fOSZ	Oszillator Frequency		8		MHz	

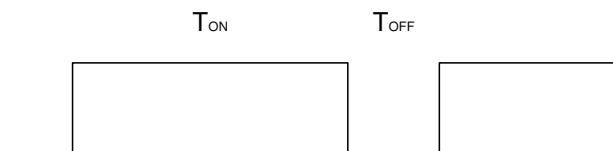
## Absolute Maximum Ratings

Operating Temperature	-40°C to +85°
Storage Temperature	-65°C to +150°C
Voltage on any Pin except RESET with respect to Ground	-0.5V to VCC+0.5V
Voltage on RESET with respect to Ground	-0.5V to +13.0V
Maximum Operating Voltage	6.0V
DC Current per I/O Pin	20.0 mA
DC Current VCC and GND Pins	200.0 mA

## PWM WAVEFORM



DMX LEVEL: 64

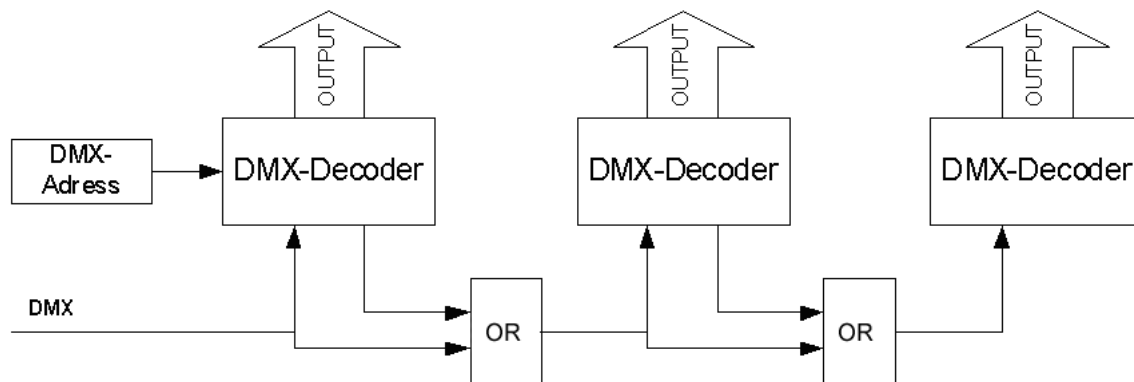


DMX LEVEL: 192

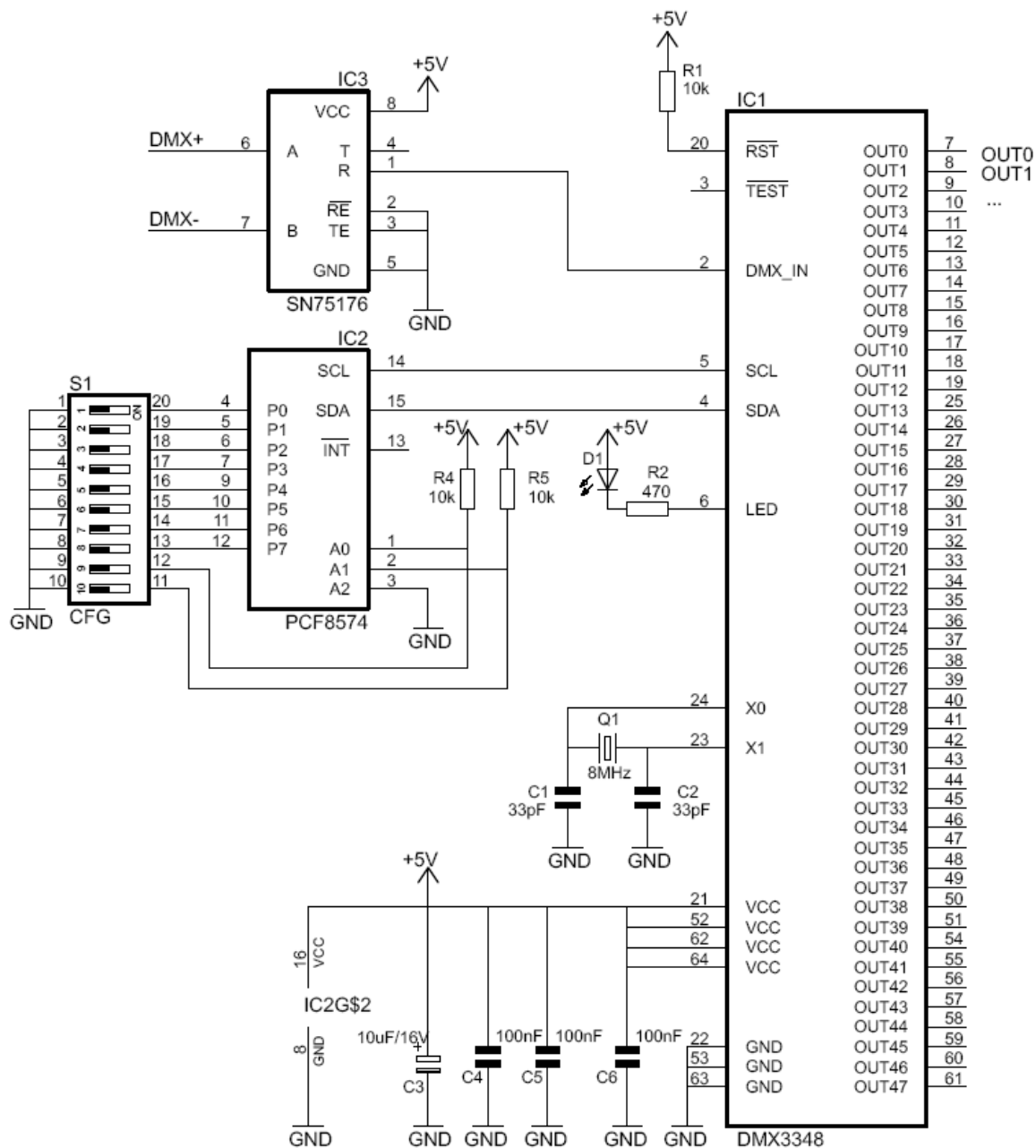
## Auto Adressing DMX (AAD)

The Auto Adressing DMX allows to combine different DMX decoder to one common DMX receiver with only one start address setting.

The DMX decoder can be each component with AAD support.

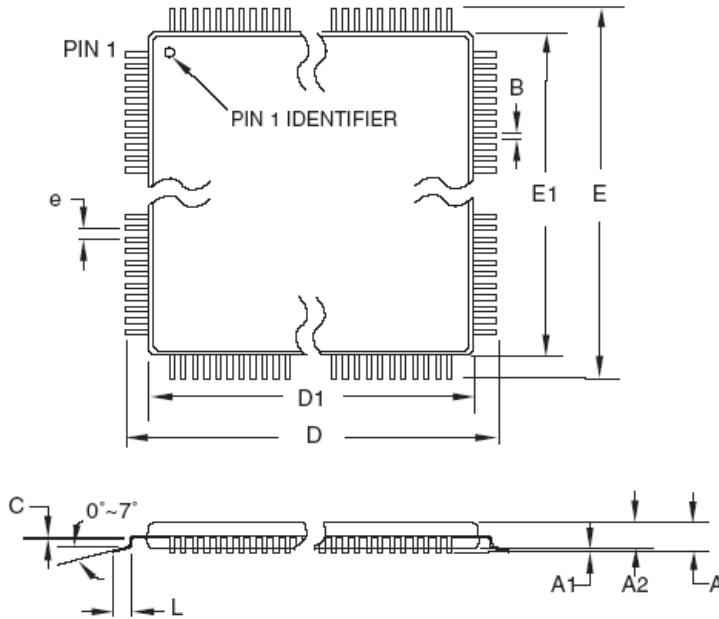


# DEVICE CONFIGURATION EXAMPLE



# PACKAGING INFORMATIONS

## DMX3348



COMMON DIMENSIONS  
(Unit of Measure = mm)

SYMBOL	MIN	NOM	MAX	NOTE
A	-	-	1.20	
A1	0.05	-	0.15	
A2	0.95	1.00	1.05	
D	15.75	16.00	16.25	
D1	13.90	14.00	14.10	Note 2
E	15.75	16.00	16.25	
E1	13.90	14.00	14.10	Note 2
B	0.30	-	0.45	
C	0.09	-	0.20	
L	0.45	-	0.75	
e	0.80 TYP			

- Notes:
1. This package conforms to JEDEC reference MS-026, Variation AEB.
  2. Dimensions D1 and E1 do not include mold protrusion. Allowable protrusion is 0.25 mm per side. Dimensions D1 and E1 are maximum plastic body size dimensions including mold mismatch.
  3. Lead coplanarity is 0.10 mm maximum.



DMX4ALL GmbH  
Reiterweg 2A  
D-44869 Bochum  
Germany

Neither the whole nor any part of the information contained in, or the product described in this manual, may be adapted or reproduced in any material or electronic form without the prior written consent of the copyright holder.

This product and its documentation are supplied on an as-is basis and no warranty as to their suitability for any particular purpose is either made or implied.

DMX4ALL will not accept any claim for damages howsoever arising as a result of use or failure of this product.  
Your statutory rights are not affected.

This product or any variant of it is not intended for use in any medical appliance, device or system in which the failure of the product might reasonably be expected to result in personal injury.  
This document provides preliminary information that may be subject to change without notice.