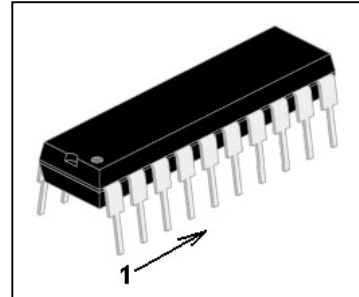


FEATURES

- 5V SUPPLY VOLTAGE
- RECEIVE DMX512 SIGNAL
- DRIVE UP TO 8 TDA8444 FOR 64 ANALOGUE OUTPUTS
- 64 STEPS AT EACH OUTPUT
- RoHS COMPLIANT
- PACKAGE: DIL20 (RoHS)

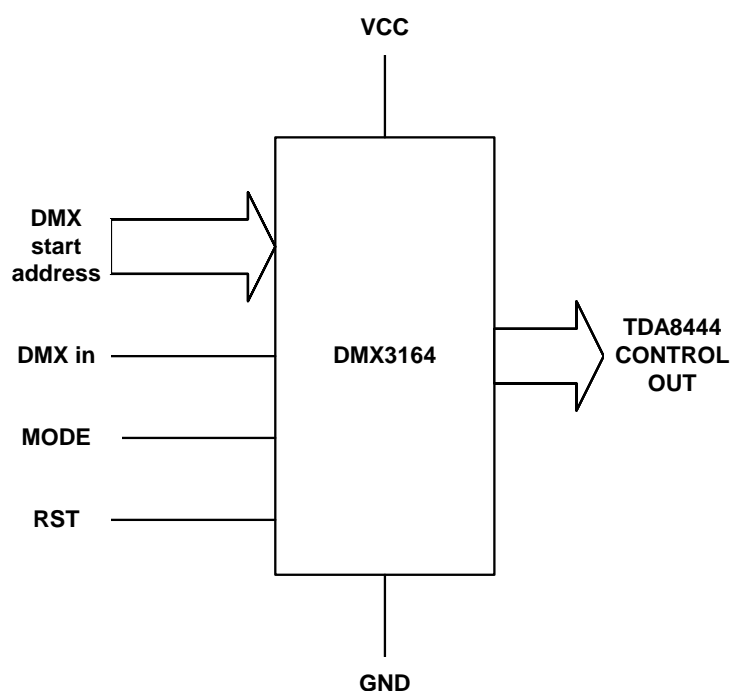


DESCRIPTION

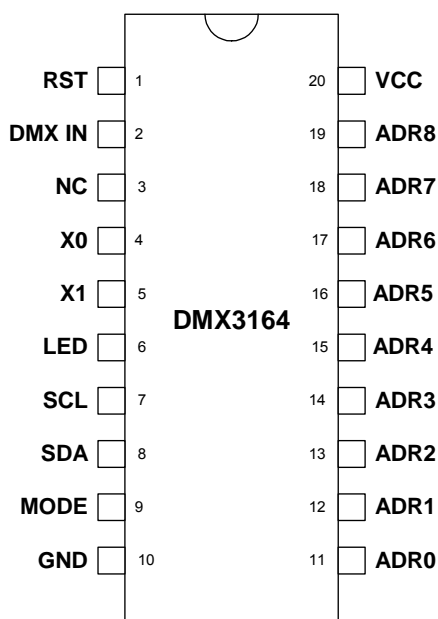
The DMX3164 is an DMX512 receiver with TDA8444 control outputs. The values of the output signals are dependent on the DMX input signal. Each analogue output has 64 steps (TDA8444). Up to 8 TDA8444 can be connected to one DMX3164. Therefore the TDA8444 with the outputs 1-8 is configured with the slave address 0. The TDA8444 with the outputs 9-16 is configured with the slave address 1, etc.

The address of output 1 is that determined from the address setting, the address for output 2 is the base address plus 1 etc.

LOGIC SYMBOL



PIN CONFIGURATION



PIN DESCRIPTION

MNEMONIC	PIN	TYPE	NAME AND FUNCTION
RST	1	I	RESET Reset input. A low level on this pin for more then 50ns will generate a reset, even if the clock is not running. Shorter pulses are not guaranteed to generate a reset
DMX IN	2	I	DMX-SIGNAL Input for the DMX512 signal
VCC	20	I	POWER This is the power supply
GND	10	I	GROUND 0V reference
X0	4	I	XTALO Input from the inverting oscillator amplifier
X1	5	O	XTAL1 Output from the inverting oscillator amplifier
LED	6	O	STATUS LED LED output. This pin can sink 20mA to drive a LED.
SCL	7	O	SERIAL DATA Two wire interface data to control the TDA8444
SDA	8	I/O	SERIAL CLOCK Two wire interface clock to control the TDA8444
ADR0-8	11;12;13 14;15;16 17;18;19	I	ADDRESS INPUT Input for the DMX start address (Format: 11→2 ⁰ ; 12→2 ¹ ; 13→2 ² ; 14→2 ³ ; 15→2 ⁴ ; 16→2 ⁵ ; 17→2 ⁶ ; 18→2 ⁷ ; 19→2 ⁸)
MODE	9	I	MODE SELECT NOT USED. For future applications.

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	-55°C to +125°
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

ERROR-CODES

The LED display internal errors. The error code is the number of flashes between 2 long times the LED is off.

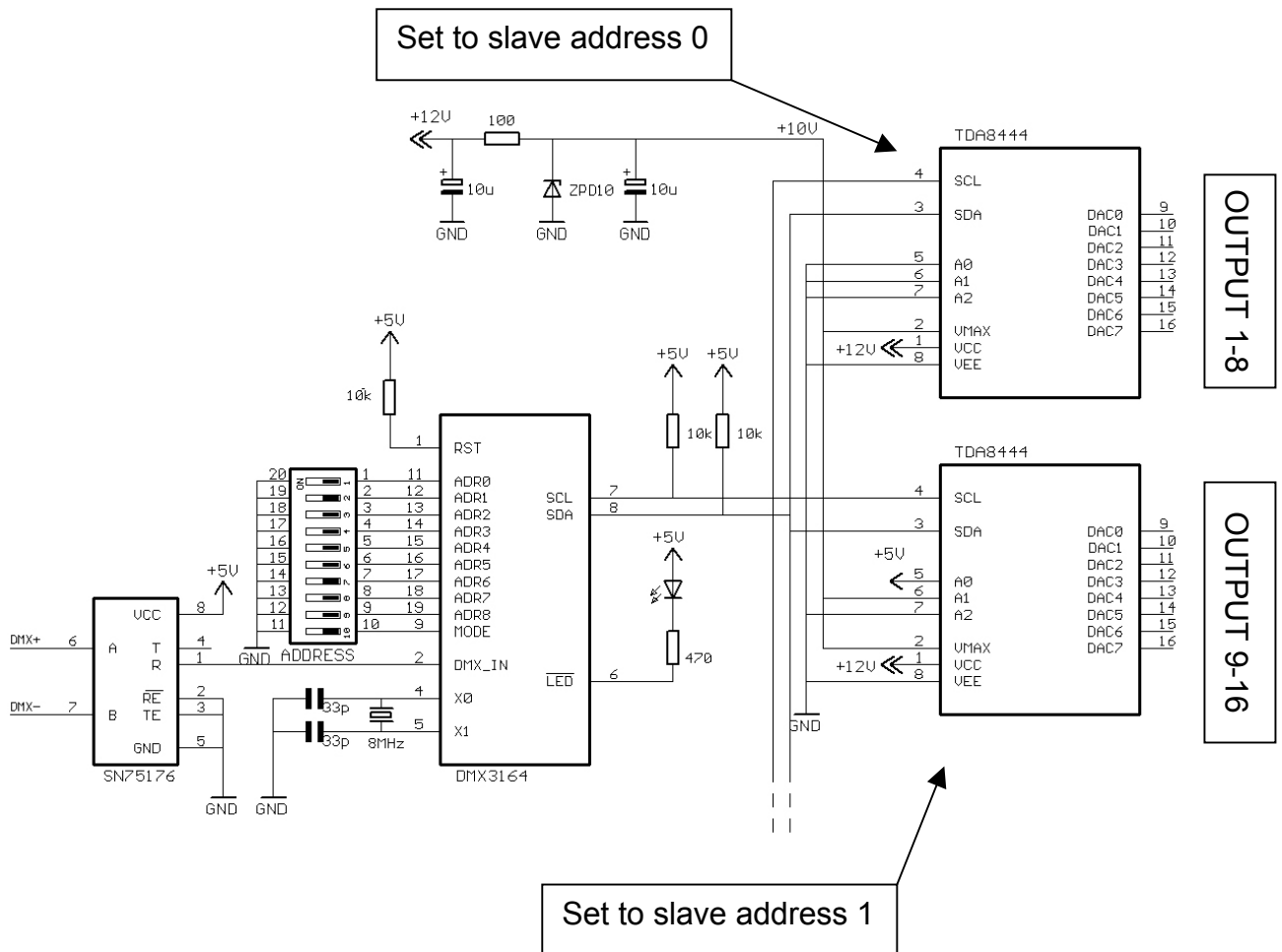
Error-Code	Description
2	No valid DMX start address is selected
3	No valid DMX signal is detected at the DMX input

TDA8444 CONFIGURATION

SLAVE ADDRESS	A0	A1	A2	ANALOG OUTPUT
0	L	L	L	1-8
1	H	L	L	9-16
2	L	H	L	17-24
3	H	H	L	25-32
4	L	L	H	33-40
5	H	L	H	41-48
6	L	H	H	49-56
7	H	H	H	57-64

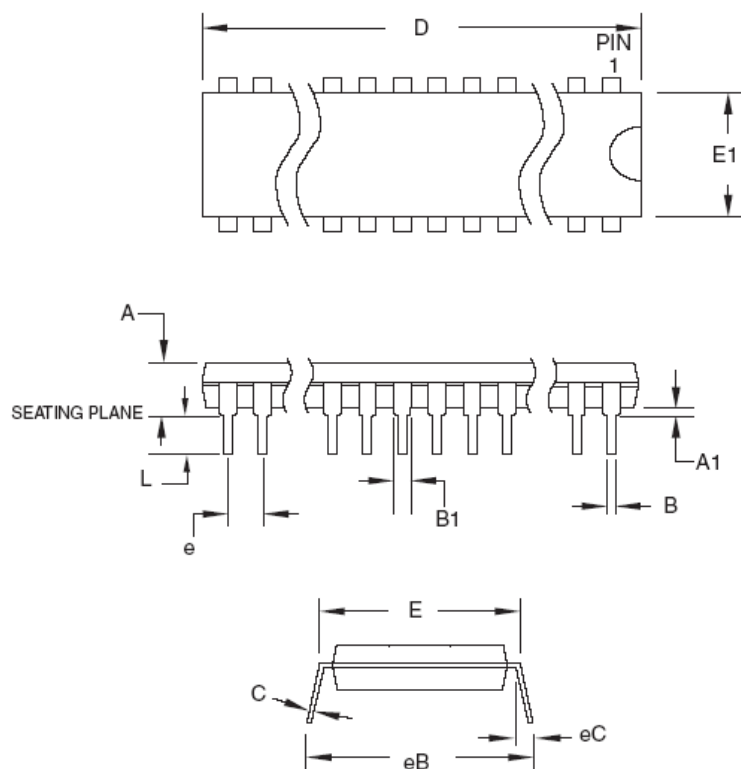
DEVICE CONFIGURATION EXAMPLE

DMX-ANALOGUE CONVERTER WITH 16 OUTPUTS



PACKAGING INFORMATIONS

20 PIN PDIP



COMMON DIMENSIONS
(Unit of Measure = mm)

SYMBOL	MIN	NOM	MAX	NOTE
A	-	-	5.334	
A1	0.381	-	-	
D	25.493	-	25.984	Note 2
E	7.620	-	8.255	
E1	6.096	-	7.112	Note 2
B	0.356	-	0.559	
B1	1.270	-	1.551	
L	2.921	-	3.810	
C	0.203	-	0.356	
eB	-	-	10.922	
eC	0.000	-	1.524	
e	2.540 TYP			

- Notes: 1. This package conforms to JEDEC reference MS-001, Variation AD.
2. Dimensions D and E1 do not include mold Flash or Protrusion.
Mold Flash or Protrusion shall not exceed 0.25 mm (0.010").

HISTORY

21.09.2006 DEVICE CONFIGURATION EXAMPEL redraw



DMX4ALL GmbH
Sophienstr. 8
D-44791 Bochum
Germany

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