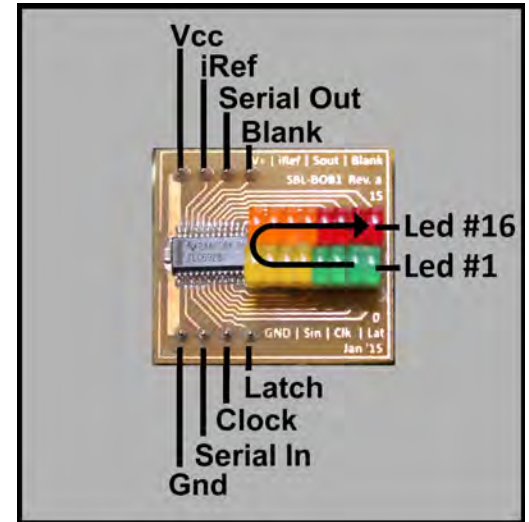
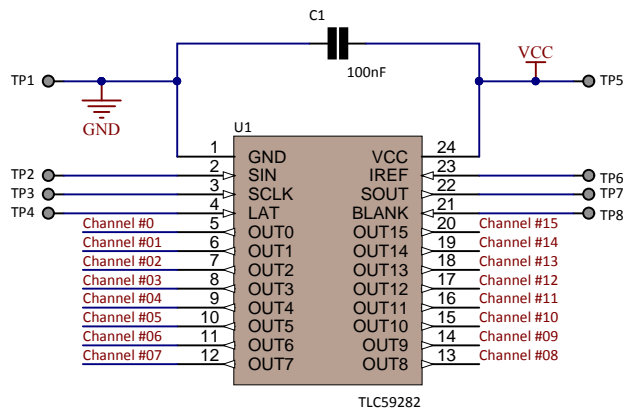


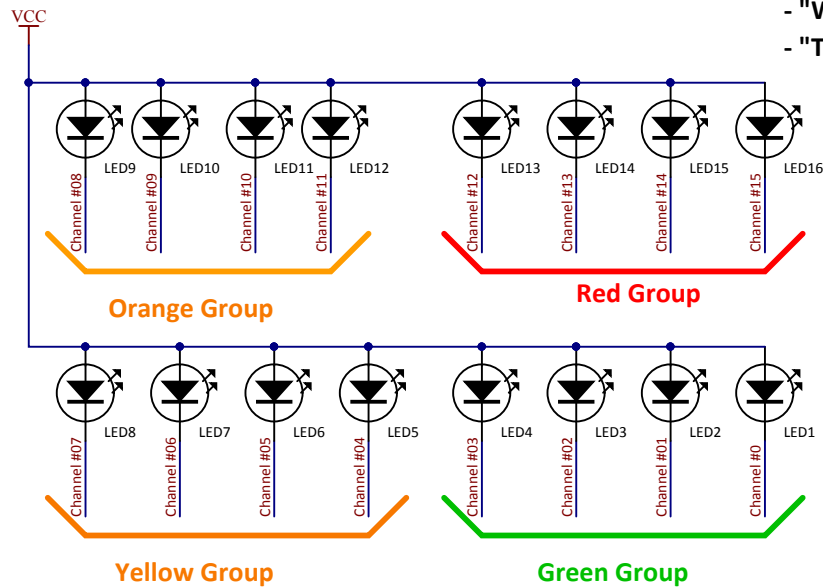
SBL-BOB-1 (16-Chan. Driver W/Led ; TLC59282)
Breadboard Friendly



Kingbright

WP2773

1.75x3.9mm Rectangular Led Lamp
Forward voltage 2.2-2.5V If=20mA



- "When BLANK is high, all outputs are forced off"
- "The data continue to transfer while LATCH is high"

$$I_{OUT} = 41.9 \times \left(\frac{1.205}{R_{IREF}} \right)$$

IREF

Riref
KΩ

GND

Breakout Board 16Led SPI (SBL-BOB-1)		Rev. b
Date : Jan '15	Sheet : 1 / 1	
Sébastien Longo	sebanolog.fr	

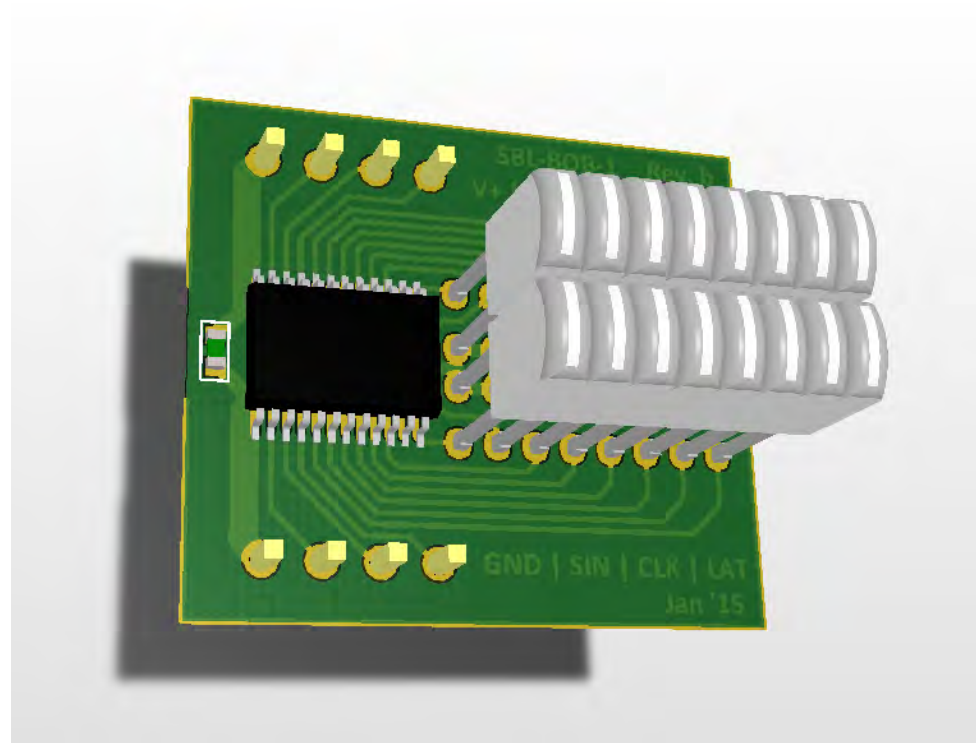
Bill of Material

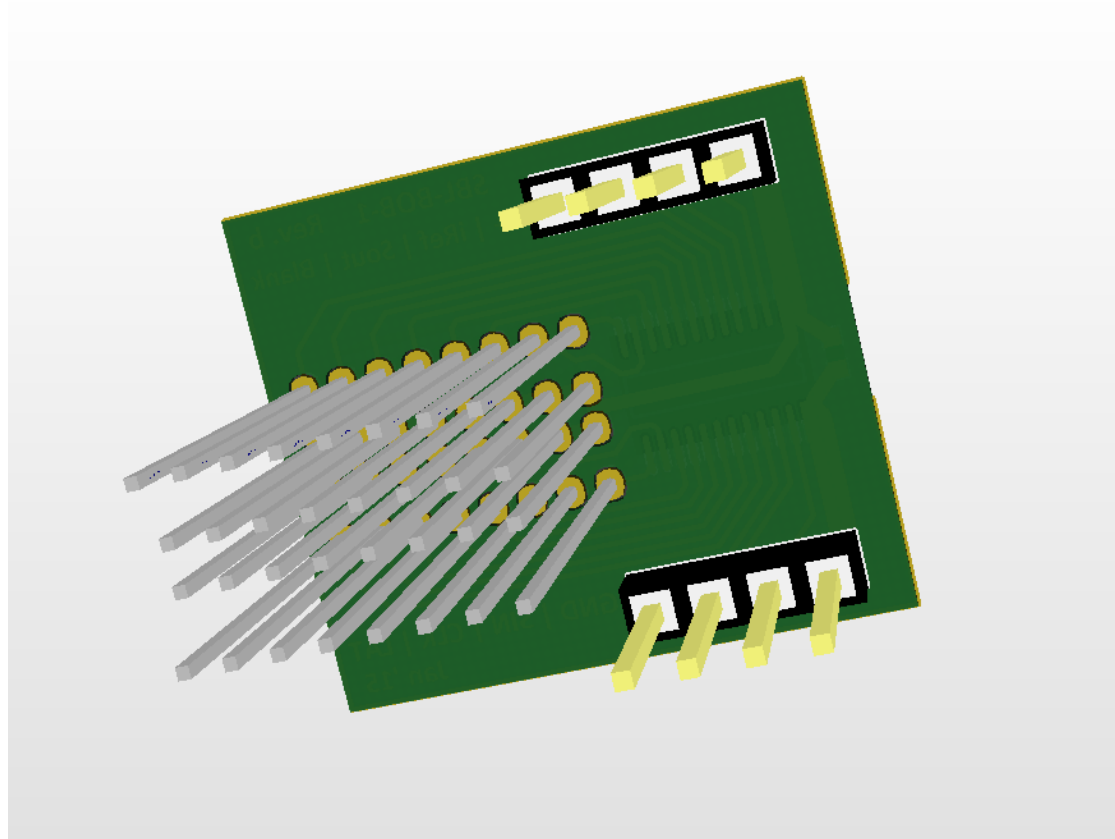
Project : SBL-BOB-1							Rev. b.		€ (excl. vat)		sebanolog.fr
Line	✓	Description	Package/Case	Designator(s)	Vendor	Part #	Qty	Unit	Ext.	Comment	
1		C 100nF / 16V MLCC X7R	0603C	C1	Mouser	77-VJ0603Y104JXPBC	<u>1</u>	0,0540 €	0,05 €	VISHAY VJ0603Y104JXPW1BC	
2		Kingbright WP2773GD Green Diffused 10 mcd ; 20 mA ; 2,2V	TH 1.75 x 3.9 mm	LED1 - 4	Mouser	604-WP2773GD	<u>4</u>	0,145 €	0,58 €	Rectangular ; Rounded end	
3		Kingbright WP2773YD Yellow Diffused 8 mcd ; 20 mA ; 2,1V	TH 1.75 x 3.9 mm	LED5 - 8	Mouser	604-WP2773YD	<u>4</u>	0,145 €	0,58 €	Rectangular ; Rounded end	
4		Kingbright WP2773ED Orange Diffused 10 mcd ; 20 mA ; 2 V	TH 1.75 x 3.9 mm	LED9 - 12	Mouser	604-WP2773ED	<u>4</u>	0,145 €	0,58 €	Rectangular ; Rounded end	
5		Kingbright WP2773ID Red Diffused 10 mcd ; 20 mA ; 2 V	TH 1.75 x 3.9 mm	LED13 - 16	Mouser	604-WP2773ID	<u>4</u>	0,145 €	0,58 €	Rectangular ; Rounded end	
6		TLC59282 16-bit Shift Register Constant Current Led Driver	SSOP-24	U1	Mouser	595-TLC59282DBQR	<u>1</u>	1,380 €	1,38 €	Texas Instruments	
7		0,1" Male Header 2x4 pins (Break Away Machine Pin)	TH	TP1 - TP8	Sparkfun	PRT-00117	<u>1</u>	2,632 €	2,63 €	40 pins (Ideal for Breadboards)	
									Total (excl. vat)	6,39 € H.T	
									Total (Incl. vat)	7,66 € T.T.C.	

Rev. A	First Revision	Jan '15
Rev. B	Minor PCB changes	Feb'15

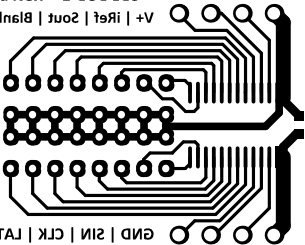
Drill Sizes	
Leds (tight fit)	0,6 mm
Headers	0,8 mm

Following Drawings Scale : 3,0
3D Top, 3D Bottom, Copper Bottom





2BL-BOB-1 Rev. b
V+ | iRef | 2out | Blank



19u '12
GND | 2IN | CLK | LAT
TAL