


LCD Module

NLC240x128BTGC2

DATA SHEET

Product specification V 1.0

Approval of Specification

	Approved by	Date
admatec		2014-02-11
Customer		

This product complies to EU directive 2002/95/EC (RoHS) of January 27th, 2003.

1 General data

Table 1.1: General data

No.	Item	Content
1.	module size	170.0 mm (W) * 102.0 mm (H) * Max 14.0 mm (D)
2.	visible area	128.0 mm (W) * 74.0 mm (H)
3.	active area	119.97 mm (W) * 63.97 mm (H)
4.	dot size	0.47 mm (W) * 0.47 mm (H)
5.	dot pitch	0.5 mm (W) * 0.5 mm (H)
6.	number of dots	240 (W) * 128 (H)
7.	duty	1/128
8.	LCD type	FSTN, negative, transmissive
9.	backlight	CFL
10.	controller	T6963CFG-0101 or compatible
11.	interface	parallel
12.	weight	225 g (approx.)

5 Block diagram

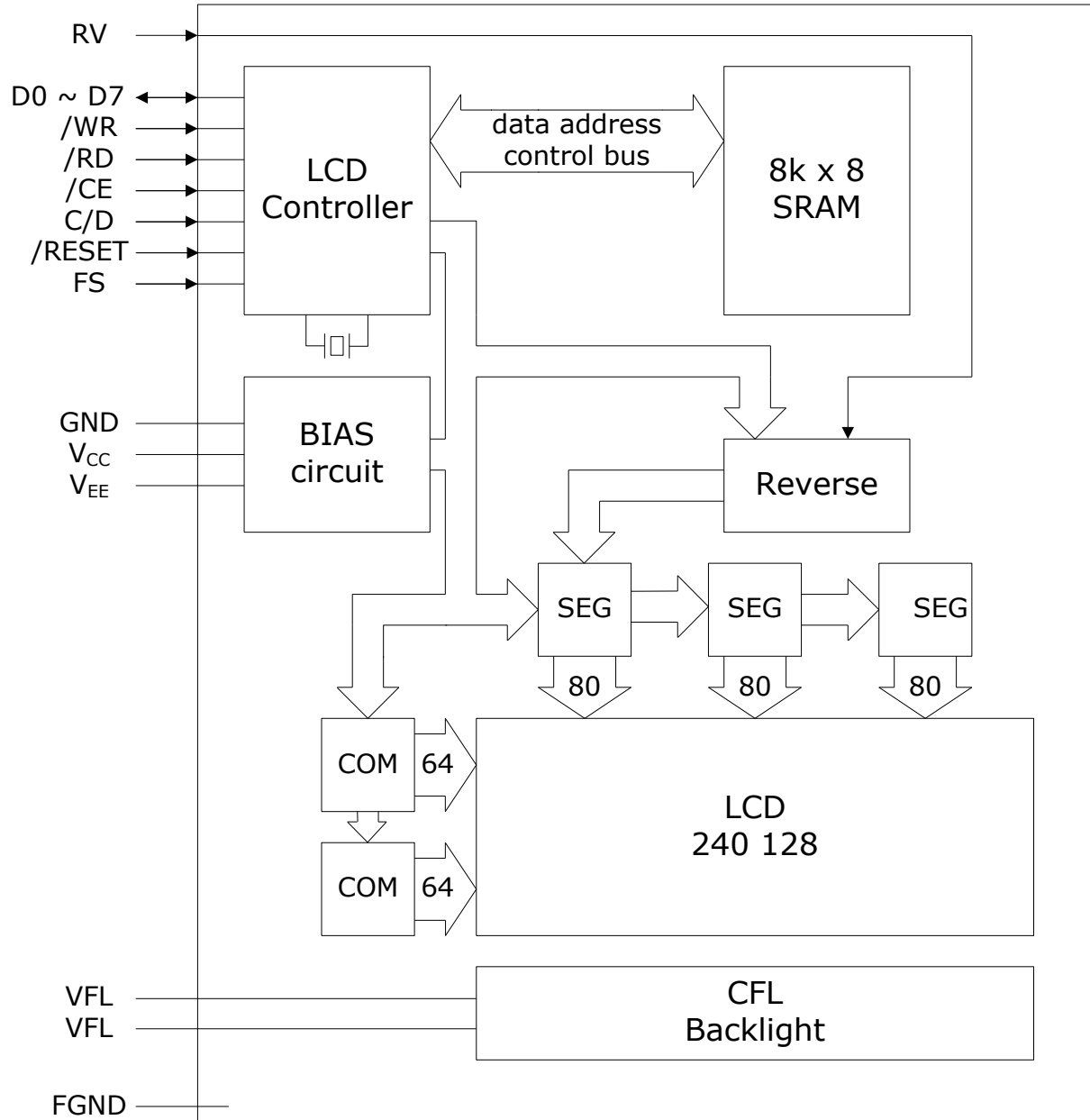


Figure 5.1 : Block diagram of NLC240x128BTGC2

6 Interface description

6.1 Interface of LCD

Table 6.1: LCD interface description

Symbol	Pin no.	IO	Function																				
FGND	1	PWR	frame ground																				
GND	2	PWR	ground																				
V _{CC}	3	PWR	power supply for logic																				
V _{EE}	4	PWR	power supply for LC driving																				
/WR	5	I	data write																				
/RD	6	I	data read																				
/CE	7	I	chip enable																				
C/D	8	I	<table border="1"> <thead> <tr> <th>/WR</th> <th>/RD</th> <th>C/D</th> <th></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1</td> <td>1</td> <td>command write</td> </tr> <tr> <td>0</td> <td>1</td> <td>0</td> <td>data write</td> </tr> <tr> <td>1</td> <td>0</td> <td>1</td> <td>status read</td> </tr> <tr> <td>1</td> <td>0</td> <td>0</td> <td>data read</td> </tr> </tbody> </table>	/WR	/RD	C/D		0	1	1	command write	0	1	0	data write	1	0	1	status read	1	0	0	data read
			/WR	/RD	C/D																		
			0	1	1	command write																	
			0	1	0	data write																	
			1	0	1	status read																	
1	0	0	data read																				
NC	9	--	not connected																				
/RESET	10	I	controller reset																				
D0	11	I/O	data bus																				
D1	12	I/O																					
D2	13	I/O																					
D3	14	I/O																					
D4	15	I/O																					
D5	16	I/O																					
D6	17	I/O																					
D7	18	I/O																					
FS	19	I	font select 'L' = 6x8 pixel/character 'H' = 8x8 pixel/character																				
RV	20	I	display data reverse 'L' = normal display 'H' = reverse display																				

Interface : 2x10 pin, 2.54 mm pitch

6.2 Interface of backlight

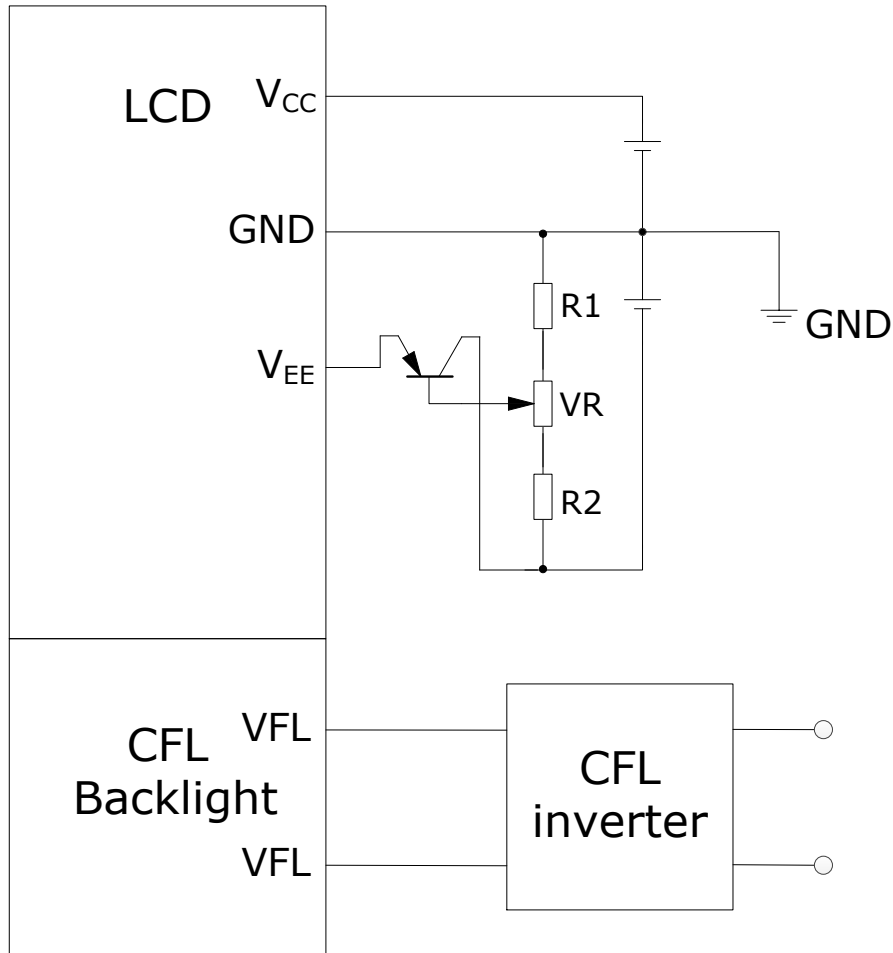
Table 6.2: Backlight interface description

Symbol	Pin no.	IO	Function
VFL	1	PWR	power supply for FL drive
--	2	--	not connected
--	3	--	not connected
--	4	--	not connected
VFL	5	PWR	power supply for FL drive

backlight connector:IL-G-5S-S3C2 or compatible

mating backlight connector:IL-G5P-S3T2-SA or IL-G-5P-S3L2-SA or compatible

7 Power supply



$$R1+VR+R2=10k \sim 20k \Omega$$

Figure 7.1 : Power supply for NLC240x128BTGC2

11 Drawing

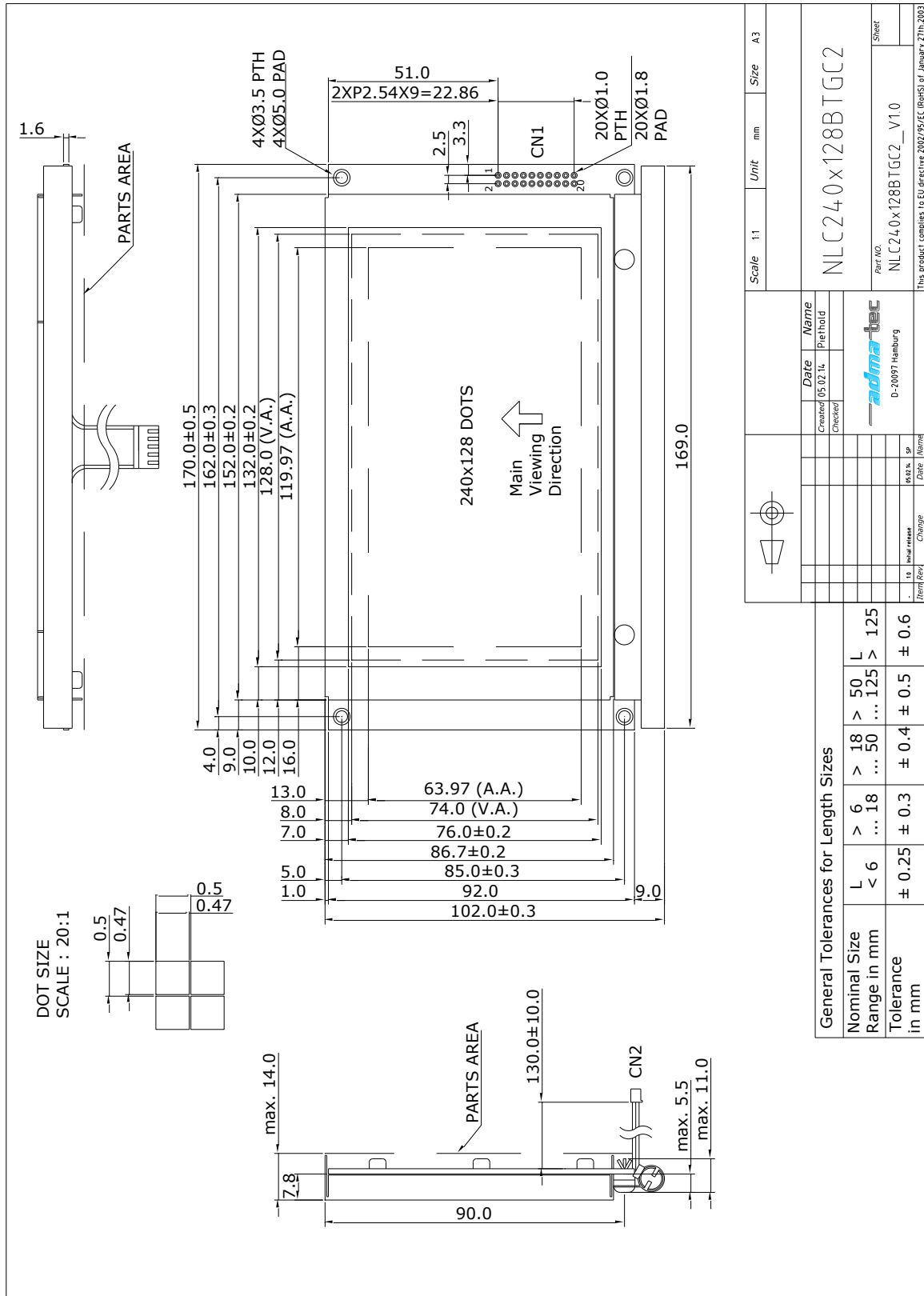


Fig 11.1: Drawing of NLC240x128BTGC2