

# LCD Module

# RoHS

## NLC128CG064CHJRGB

(Status: March 2010)

# Specification V1.2

### Approval of Specification

	Approved by	Date
Admatec		23.03.2010
Customer		

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

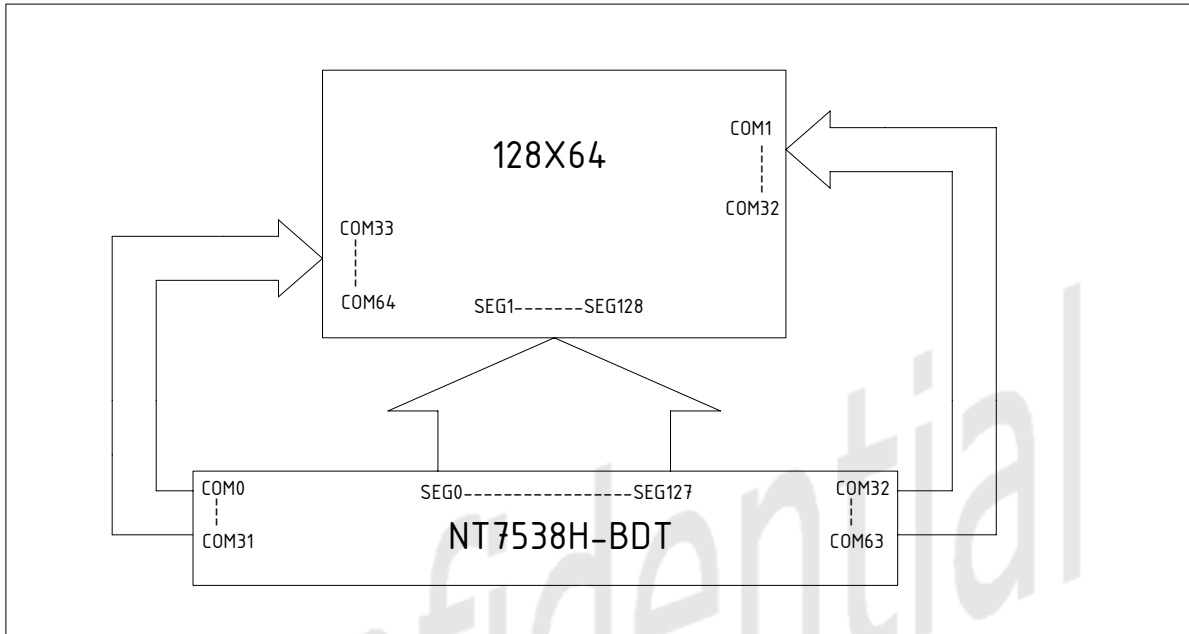


## 1. MECHANICAL DATA

NO.	ITEM	CONTENTS	UNIT
1	Product No.	NLC128CG064CHJRGB	
2	Module Size	70.0(W)*58.0(H)*5.2(T)	mm
3	Dot Size	0.445(W)*0.445(H)	mm
4	Dot Pitch	0.465(W)*0.465(H)	mm
5	Number of Dots	128(W)*64(H)	--
6	Duty / Bias	1/65; 1/9	--
7	LCD Type	FSTN positive mode, Transflective (high transmissive)	--
8	Viewing Direction	6 O'clock	--
9	Backlight	LED RGB	--
10	Controller	NT7538H-BDT	--
11	DC to DC circuit	Build-in	--
12	Weight	25 (Approx.)	g



# 5. BLOCK DIAGRAM



Software: ADC=0 (SEG0~SEG128)  
 Hardware: 1/65 Duty (COM63~COM0)

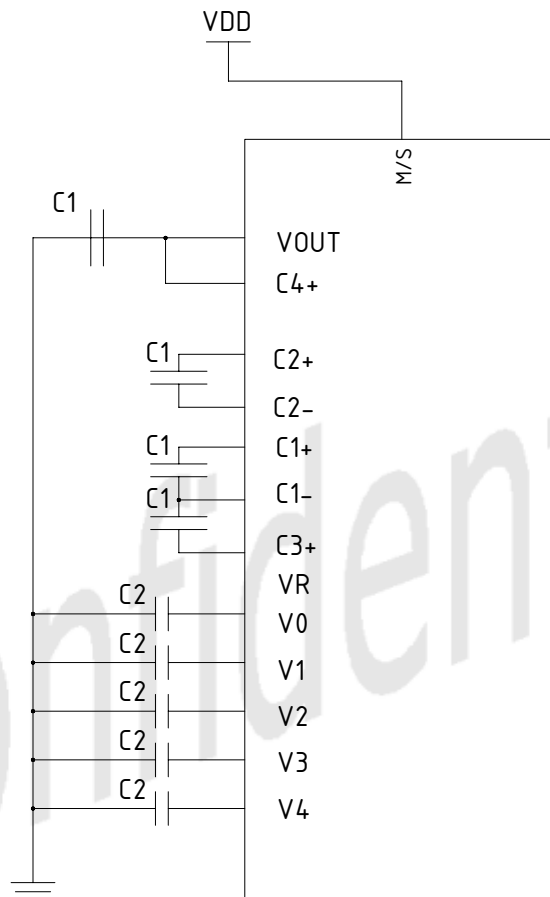


## 6. INTERNAL PIN CONNECTION

PIN	SYMBOL	FUNCTION
1	/CS1	This is the chip select.
2	/RE5	Reset pin.
3	A0	A0="H": indicate that D0 to D7 are display data.
4	R/W	A0="L": indicate that D0 to D7 are control data.
5	RD	Read/Write control pin.
6-13	D0~D7	Data bus
14	VSS	Power supply (GND)
15	VOUT	DC/DC voltage converter output.
16	CAP3+	Capacitor3+ pad for internal DC/DC voltage converter
17	CAP1-	Capacitor1- pad for internal DC/DC voltage converter
18	CAP1+	Capacitor1+ pad for internal DC/DC voltage converter
19	CAP2+	Capacitor2+ pad for internal DC/DC voltage converter
20	CAP2-	Capacitor2- pad for internal DC/DC voltage converter
21	V1	LCD driver supply voltages. The voltage determined by LCD cell is impedance-converted by a resistive driver or an operation amplifier for application. Voltages should be the following relationship: $V0 \geq V1 \geq V2 \geq V3 \geq V4 \geq VSS$
22	V2	
23	V3	
24	V4	
25	V0	
26	VR	Voltage adjustment pin.
27	VDD	Power supply
28	C86	This is the MPU interface switch terminal.
29	P/S	This is the parallel data input/serial data input switch terminal.
30	IRS	This terminal selects the resistors for the V0 voltage level adjustment.



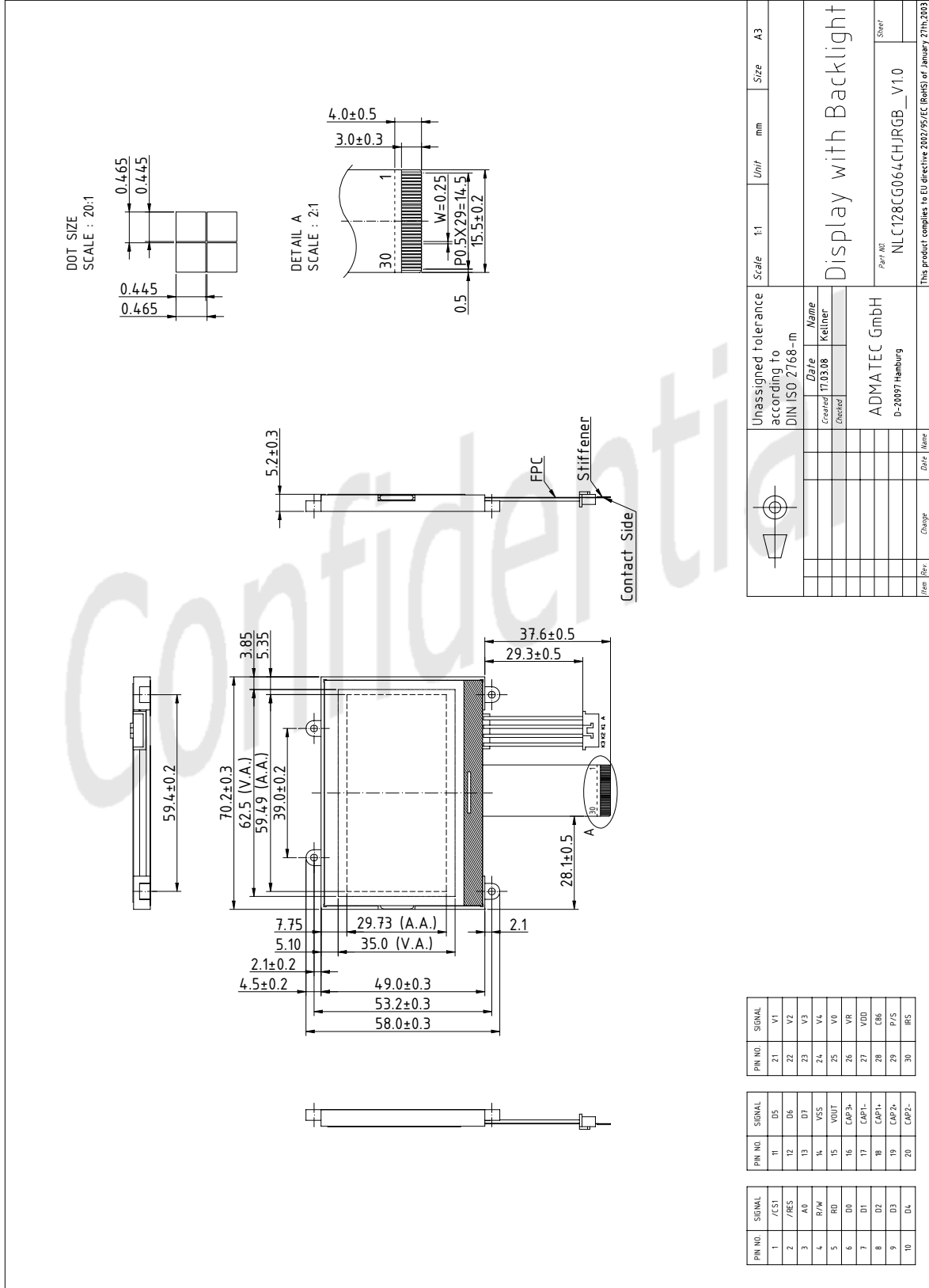
# 7. POWER SUPPLY



4x step-up voltage circuit  
 C1=1.0~4.7µF / X5R  
 C2=0.1~2.2µF unassigned



# 9. DRAWING



Unassigned Tolerance according to DIN ISO 2768-m	Scale	t1	Unit	mm	Size	A3
Created: 11.03.08	Name	Display with Backlight				
Checked:	Name	Part No: NLC128CG064CHJRGB_V10				
	Name	This product complies to EU directive 2002/95/EC (RoHS) of January 27th, 2003				
	Name	ADMATEC GmbH				
	Name	D-20097 Hamburg				
	Name	Sheet				

PN NO.	SIGNAL	PN NO.	SIGNAL	PN NO.	SIGNAL
1	/CS1	11	D5	21	V1
2	/RES	12	D6	22	V2
3	AU	13	D7	23	V3
4	R/W	14	VSS	24	V4
5	RD	15	VOUT	25	V0
6	D0	16	CAP3+	26	VR
7	D1	17	CAP1-	27	VDD
8	D2	18	CAP1+	28	CS6
9	D3	19	CAP2-	29	P/S
10	D4	20	CAP2+	30	RS