


LCD Module

NLC320S240BSJCK2

DATA SHEET

Product specification V 1.0

Approval of Specification

| | Approved by | Date |
|----------|---|------------|
| admatec |  | 2013-07-17 |
| 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 | 142.6mm (W) * 93.7mm (H) * 7.8mm (D) |
| 2. | visible area | 100.0mm (W) * 75.5mm (H) |
| 3. | active area | 95.99mm (W) * 71.99mm (H) |
| 4. | dot size | 0.285mm (W) * 0.285mm (H) |
| 5. | dot pitch | 0.3mm (W) * 0.3mm (H) |
| 6. | number of dots | 320 (W) * 240 (H) |
| 7. | duty | 1/240 |
| 8. | LCD type | FSTN, positive, transfective |
| 9. | backlight | CFL |
| 10. | interface | Parallel |
| 11. | DC/DC converter | Included |
| 12. | weight | 120g (approx.) |

5 Block diagram

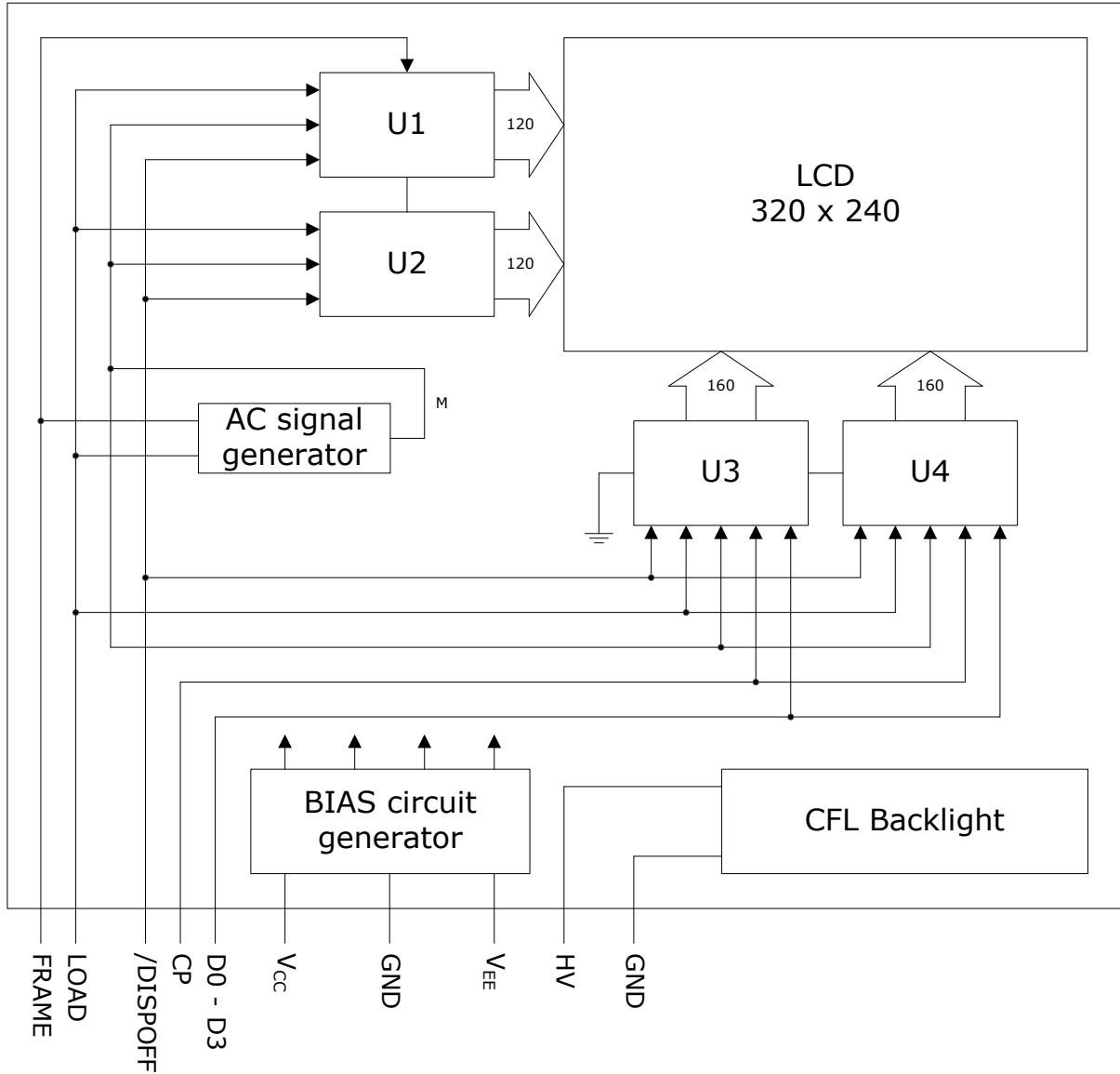


Figure 5.1 : Block diagram of NLC320S240BSJCK2

6 Interface description

6.1 Interface of LCD

Table 6.1: LCD interface description

| Symbol | Pin no. | IO | Function |
|-----------------|---------|-----|---|
| Frame | 1 | I | first line marker |
| Load | 2 | I | data latch |
| CP | 3 | I | data shift |
| V _{CC} | 4 | PWR | power supply for logic |
| GND | 5 | PWR | ground |
| V _{EE} | 6 | PWR | contrast voltage |
| D0 | 7 | I/O | data bus |
| D1 | 8 | I/O | |
| D2 | 9 | I/O | |
| D3 | 10 | I/O | |
| /DISPOFF | 11 | I | display enable "H": display on "L": display off |
| NC | 12 | -- | not connected |

FPC: 12 pin, 1.0 mm pitch

mating LCD connector: ELCO/6227 012 100 800 or equivalent

6.2 Interface of backlight

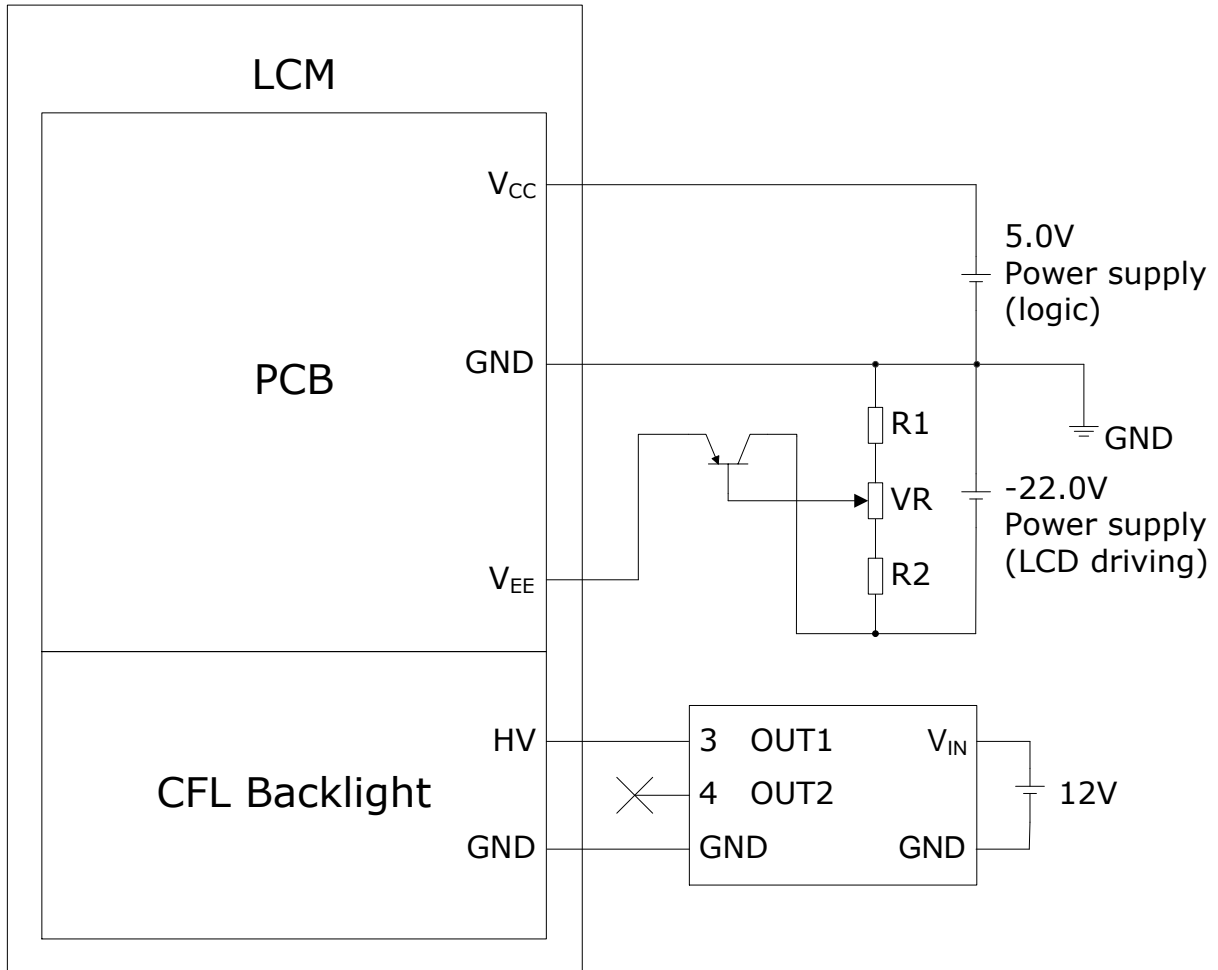
Table 6.2: Backlight interface description

| Symbol | Pin no. | IO | Function |
|--------|---------|-----|---------------|
| GND | 1 | PWR | ground |
| NC | 2 | -- | not connected |
| NC | 3 | -- | not connected |
| HV | 4 | PWR | power supply |

backlight connector: JAE IL-G4S-S3C2-SA

mating backlight connector: IL-G-4P-S3T2-SA(JAE)

7 Power supply



Note: $R1 + VR + R2 = 10\text{ k}\Omega - 20\text{ k}\Omega$
 recommended CFL inverter: TDK CXA-L10L

Figure 7.1 : Power supply for NLC320S240BSJCK2

10 Drawing

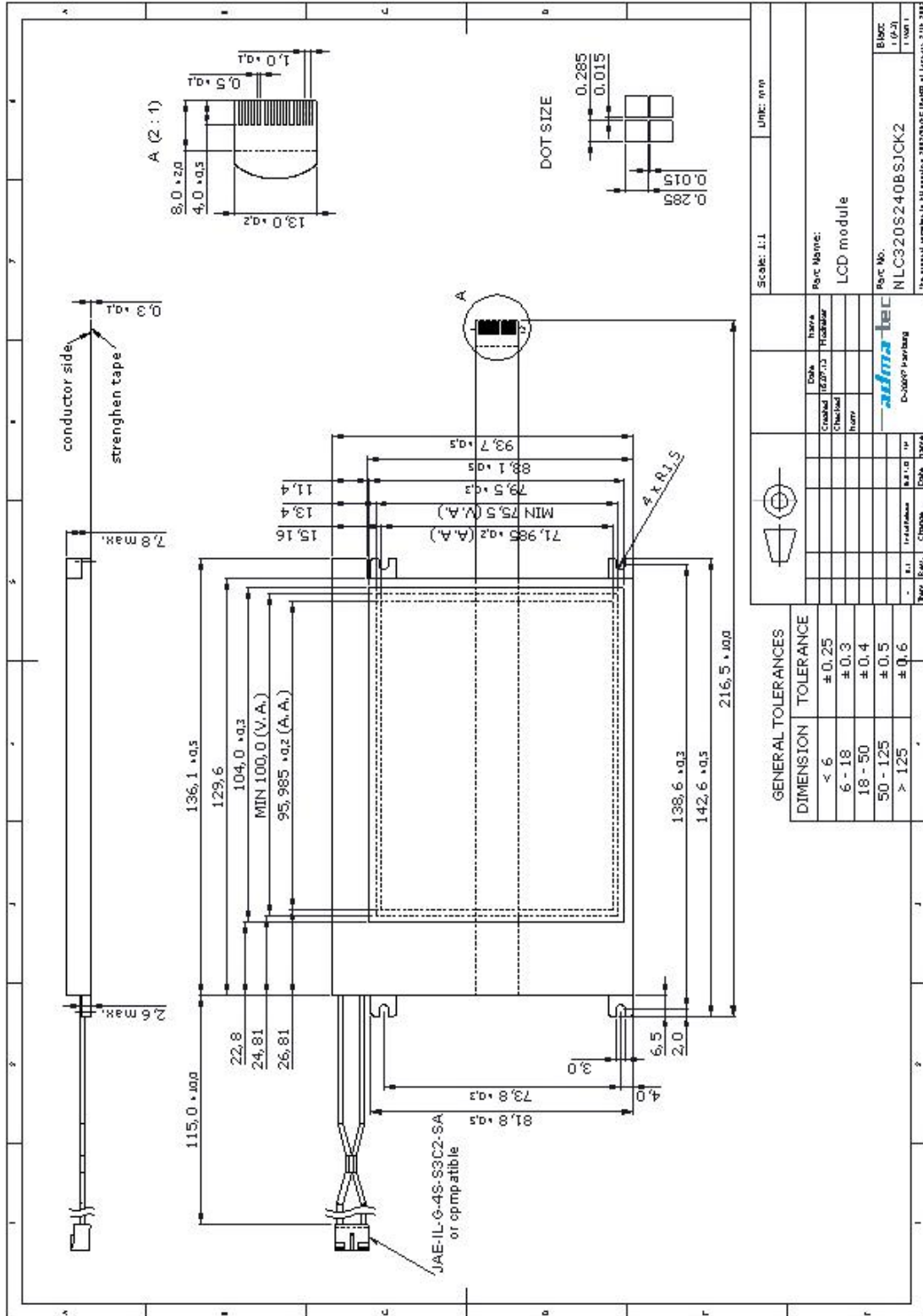


Fig 10.1: Drawing of NLC320S240BSJCK2