

## DESIGN OF CUSTOMIZED DISPLAYS

### Please send us:

- a sketch or drawing of the intended display
- details according to the questionnaire
- volume of requested mass production with time schedule

### We will send you an offer including:

- tooling costs incl. prototypes
- price for mass production
- time schedule and terms

In case of an order you will get a drawing for your approval. After approval of the drawing, we will start to manufacture the prototypes. After approval of the prototypes by yourself, we will start with mass production. We follow this procedure since many years. This is to ensure that each step has to be approved by you, before the next step will be done. You will be therefore on the safe side.

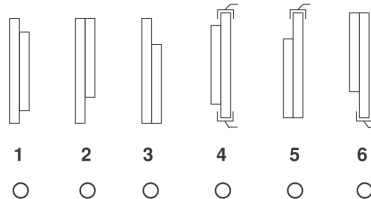
### Our capabilities include:

- Glass LCDs
- Chip on Board
- Chip on Flex/Chip on Foil
- Chip on Glass
- Custom LCD Character and Graphics Modules
- Value Added including Zebra Strips, Bezels, PCB's, Membrane Switches, Silicone Rubber Key Pads

### Custom LCD Design Guide



### LCD Configuration - Select one



A = WIDTH OF GLASS \_\_\_\_\_ mm  
B = LARGE GLASS \_\_\_\_\_ mm  
C = VIEWING AREA \_\_\_\_\_ mm

D = VIEWING AREA \_\_\_\_\_ mm  
E = SMALL GLASS \_\_\_\_\_ mm  
F = GLASS THICKNESS \_\_\_\_\_ mm

**Application** \_\_\_\_\_ ☐ Outdoor ☐ Indoor  
Operating temperature from \_\_\_\_\_ °C to \_\_\_\_\_  
Storage temperature from \_\_\_\_\_ °C to \_\_\_\_\_  
☐ Reflective (for ambient light)  
☐ Transflective (for ambient light with possibility of backlight)  
☐ Transmissive (for backlight only)

### Mode

- |                               |   |                                |                                  |                                   |
|-------------------------------|---|--------------------------------|----------------------------------|-----------------------------------|
| <input type="checkbox"/> TN   | <input type="checkbox"/> STN (yellow/green) | <input type="checkbox"/> FSTN  | <input type="checkbox"/> FSC     | <input type="checkbox"/> NEGATIVE |
| <input type="checkbox"/> HTN  | <input type="checkbox"/> STN (grey)         | <input type="checkbox"/> DSTN  | <input type="checkbox"/> CSTN    | <input type="checkbox"/> POSITIVE |
| <input type="checkbox"/> EBTN | <input type="checkbox"/> STN (blue)         | <input type="checkbox"/> FFSTN | <input type="checkbox"/> TFT     |                                   |
| <input type="checkbox"/> ATN  |   | <input type="checkbox"/> ESTN  | <input type="checkbox"/> OLED    |                                   |
| <input type="checkbox"/> VA   |   | <input type="checkbox"/> ASTN  | <input type="checkbox"/> E-PAPER |                                   |

### Connection

- |                                     |  |
|-------------------------------------|--|
| <input type="checkbox"/> Elastomer  | <input type="checkbox"/> Heatseal            |
| <input type="checkbox"/> Fixed pins | <input type="checkbox"/> FFC                 |
| <input type="checkbox"/> Connector  | <input type="checkbox"/> FPC Pitch: _____ mm |

**Viewing angle** ☐ Top view, 12 o'clock ☐ Bottom view, 6 o'clock

### Electrical Specifications

operating voltage \_\_\_\_\_ Volt  
Driving frequency \_\_\_\_\_ Hz  
Driving IC, model \_\_\_\_\_  
Brand of IC \_\_\_\_\_

### Driving

☐ Static (direct) ☐ Multiplexed Duty rate \_\_\_\_\_

### Custom Module Design Guide

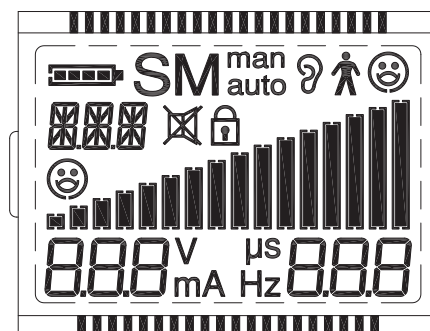
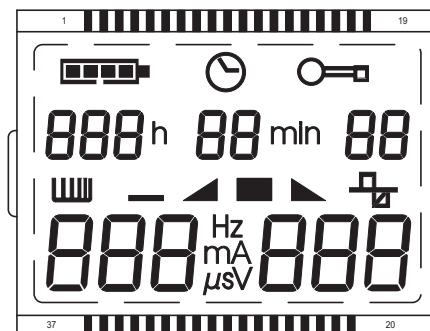
PCB technology: size: COG: total size \_\_\_\_\_ x \_\_\_\_\_  
COB: total size \_\_\_\_\_ x \_\_\_\_\_  
TCP: total size \_\_\_\_\_ x \_\_\_\_\_

☐ Backlight ☐ LED ☐ EL ☐ CCFL Color: \_\_\_\_\_

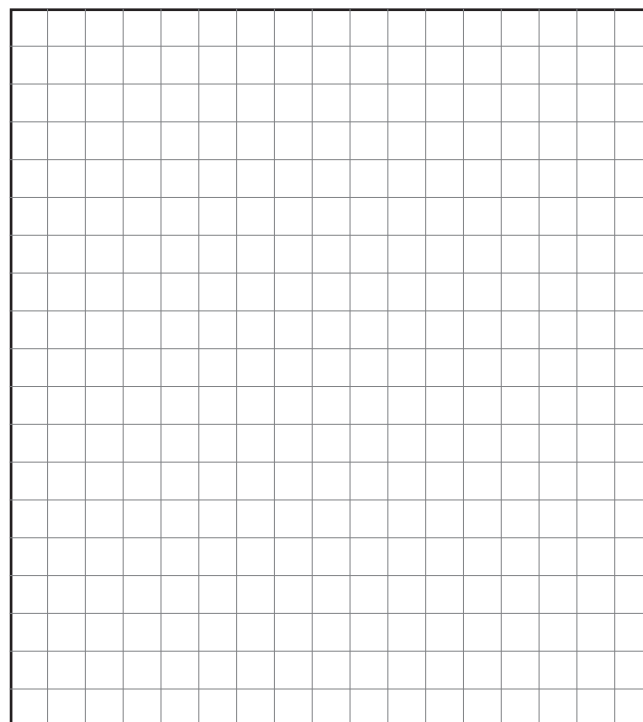
☐ Touch-Panel Technology: \_\_\_\_\_

Other description: \_\_\_\_\_

## CUSTOM LCD AND MODULES



## DISPLAY - DESIGN



COMPANY \_\_\_\_\_ TEL \_\_\_\_\_  
STREET \_\_\_\_\_ FAX \_\_\_\_\_  
CITY \_\_\_\_\_  
NAME \_\_\_\_\_ Req. prototypes \_\_\_\_\_ pcs  
E-MAIL \_\_\_\_\_ Annual demand \_\_\_\_\_ pcs