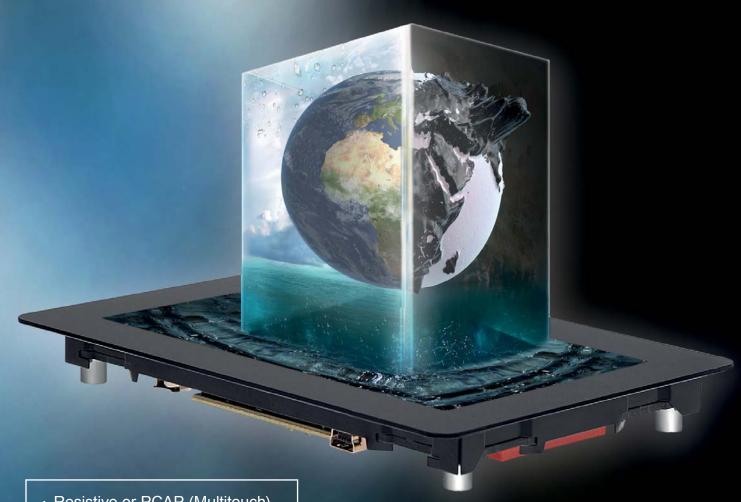




EA uniTFT - 5" 7" 10.1" MULTIFUNCTION TFT



- Resistive or PCAP (Multitouch)
- · Object oriented screen layout
- · Vectorized character set: **ASCII** and Unicode
- · Extreme fast rendering with up to 50fps
- · Alpha blending, moving objects
- · 7 Interfaces: USB, 2xI2C, 2xSPI, 2xRS-232







PLAYING WITH OBJECTS



TFT displays became indispensable in the industrial and medical sectors as well as in the everday life. Color displays simplify operation and enhance any device. Especially optically benefit small and larger applications from the use of a color display. What's also important is an attractive screen layout - what counts are clarity and modern design.

This is where the concept of the new uniTFT displays ELECTRONIC ASSEMBLY is about. There are a number visually stunning objects available, which can be adjusted by simple means to the individual needs. With the graphical editor screen pages are easily created using drag-and-drop operation. The properties of each object are edited at any time, actions (for example, for touch keys) are definable.



USB AND OTHER INTERFACES

The new EA uniTFT provides various interfaces to the outside world. For flashing and debugging or for normal operation an USB interface is available. Also SPI, RS232 and I²C bus interface are onboard. If external devices or actuators need to be operated, 3 further, declared as the master interfaces SPI, RS-232 and I²C bus can be used for this.

4 analog inputs and PWM outputs enable processing of analog signals, 16 digital I/Os (up to 128 expandable) assume varied control tasks. A video input provides direct images which may appear on the display or be stored on the integrated micro SD card (up to 32GB).

OBJECTS, VARIABLES, CALCULATING

All imaginable objects can be placed anywhere, moved and deleted. Windows fonts are stored directly on the display, font zoom and rotation are lossles at any time. Thanks to automatic ASCII and Unicode switching, different systems are flexible supported; Chinese characters included. Elegant effects for showing or hiding objects or blowing in are already integrated.

Stylesheets organize a consistently uniform design. Images as JPG, PNG and SVG (also transparent) can be integrated, format for sound is MP3. Together with the integrated, battery-backuped time base, events may be documented along with a time stamp. Control processes may run completely autonomously without external computer.

ZEICHNEN / GRAFISCHE PRIMITIVE

| Bezeichnung | | Befehlscode | Beschreibung |
|----------------------------|------|--|--|
| Rechteck(abgerundet) | #GRR | Object-id, Drawstyle-nr, PosX, PosY, Anchor, Width, Height, Radius, BorderWidth, Angle | Definiert abgerundetes Rechteck in Object.Id in Abhängikeit von Drawstyle-nr, PosX, PosY, Anchor(09), Width[Pixel], Height[Pixel], Radius(Pixel), BorderWidth(0100), Angle(0360) |
| Polylinie zeichnen | #GPL | Object-id, Drawstyle-nr, PosX, PosY, PosX2, PosX2, PosX3, PosX3, | Definiert Polylinie in Object-Id in Abhängikeit von Drawstyle-nr und den entsprechenden PosX sowie PosY Punkten. |
| Plygon(gefüllt) | #GPF | Object-id, Drawstyle-nr, PosX, PosY, PosX2, PosY2, PosX3, PosY3, | Definiert gefülltes Polygon in Object-id in Abhängikeit von Drawstyle-nr und den entsprechenden PosX sowie PosY Punkten. Letzer Punkt wird automatisch mit Startpunkt verbunden. |
| Polylinie/Polygon addieren | #GPA | Object-id, PosX, PosY, PosX2, PosY2, | Addiert zusätzliche PosX und PosY zu Object-id. |
| Polypath Segment | #GPP | Object-id, Drawstyle-nr, PosX, PosY, Segment1, Segment2, | Definiert gefülltes Polygon in Object-id in Abhängikeit von Drawstyle-nr, PosX und PosY sowie den folgenden Segmenten. Dadurch sind runde Formen möglich |
| Polygon(geometrisch) | #GGP | Object-id, Drawstyle-nr, PosX, PosY, Anchor, Radius, NumberCorners, BorderWidth, Angle | Definiert Polygon in Object.id in Abhängikeit von Drawstyle.nr. PosX, PosY, Anchor(09), Radius(Post), NumberCorners, Borderwith(0100) und Angle(0360). 3 Bespiel: |
| Polygon(Stern) | #GGS | Object-id, Drawstyle-nr, PosX, PosY, Anchor, Radius1, Radius2, CountPoints, BorderWidth, Angle | Definiert stermformiges Polygon in Object-ld in Abhängikeit von Drawstyle-nr, PosX, PosY, Anchor(09), Radius1(Poxel), Radius2(Poxel), CountPoints, Borderwith(0100) und Angle (0360) |
| Kreis/Ellipse | #GET | Object-id, Drawstyle-nr, PosX, PosY, Anchor, Radius1, Radius2, BorderWidth, Angle | Definiert kreis- bzw. ellipsenformiges Polygon in Object-Id in Abhängikeit von Drawstyle-nr, PosX, PosY, Anchor(09), Radius1(Pixel), Radius2(Pixel), Borderwith(0100) und Angle (0360). |
| Bogen | #GEA | Object-id, Drawstyle-nr, PosX, PosY, Anchor, Radius1, Radius2, StartAngle, StopAngle, BorderWidth, Angle | Definiert gebogenes Polygon in Object-Id in Abhängkeit von Drawstyle-nr, PoaX, PoaY, Anchor (09), Radiust(Proe), Radiust(Proe), StartAngle(0350), StopAngle(0350), Borderwith (0100) und Angle(0350) |
| Pie | #GEP | Object-id, Drawstyle-nr, PosX, PosY, Anchor, Radius1, Radius2, StartAngle, StopAngle, Angle | Definiert Polygon in Object-ld in Abhängikeit von Drawstyle-nr, PoaX, PoaY, Anchor(09), Radius1(Pixel), Radius2(Pixel), StartAngle(0360), StopAngle(0360) und Angle(0360). |



THE TOUCHPANEL: 5" - 7" - 10.1" RESISTIVE OR PCAP

Thanks to the high level of integration this display makes it easy to create a simple and clear user interface. A variety of powerful functions assist in the programmer. Individual key sizes and configurations are possible. When key is pressed, it wil be highlighted and any action can be done (setting a port, sending some data or switch to a new screen. Also settings with a slider (linear) or knob (circle)are implemented and can be operated by touchpanel.

The extensive functionality makes this display a complete, versatile HMI, which is at the same time designed extremely compact. The resistive touch panel can also be operated with a stylus or with thick gloves; the PCAP version even works properly behind a 4 mm thick glass plate or with thin gloves.

DESIGNER FOR WINDOWS

With a graphics tool, a program written individually for the possibilities of this display, screen layouts and user interfaces are created in a flash. All properties of an object are adjusted quickly and easily as well as the standard stylesheets are modified. The built-in simulator immediately shows the result and a "deploy" function provides an easy download to the display.



The operating temperature range of the display is specified for -20 .. + 70 °C. A long availability and high quality standards are evidence of the target markets, industry, automotive and medical.

