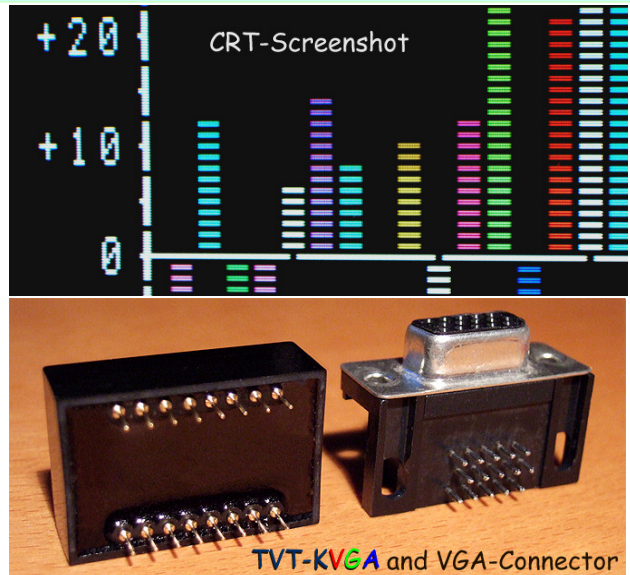
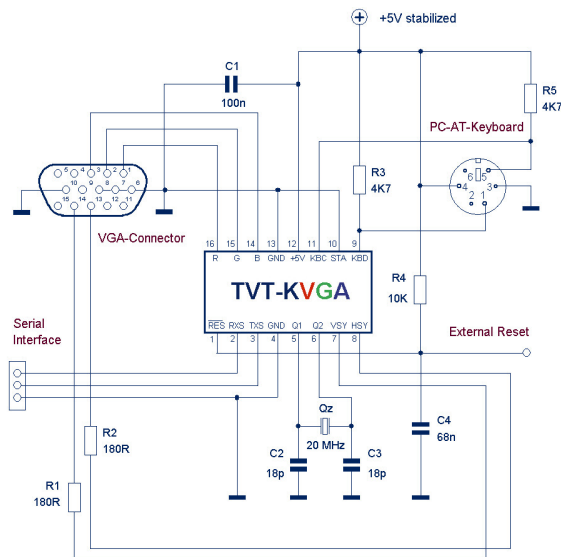


NEW!

Super small, easy to integrate and energy-saving...

TVT-KVGA

Now it's easy to use PC-Monitors and PC-Keyboards with your Microcontroller Systems - integrate the new TVT-KVGA Controller !



The TVT-KVGA makes your completed Microcontroller projects independent from a PC, while offering a PC-like ease of use (Monitor, Keyboard). The TVT-KVGA can switch VESA-compatible VGA-Monitors into an energy saving mode, that means it can virtually switch the Monitor on and off. The TVT-KVGA itself can also be shut down by command, ideal for integration into battery operated mobile devices, which need a keyboard and/or a monitor only temporarily. Leaving your PC switched off more often will reduce your electricity bill, and the TVT-KVGA will pay for itself very fast.

- **Text representation:** 50 chars by 18 lines in up to 13 colors, 8x5 char matrix. All versions include german, english, french, italian and spanish special characters. Coding of supported chars in accordance to ASCII-/ANSI standards.
- **Realtime-Barchart-Graphics:** axis-position, axis-markers, headline, axis-texts, colors and data are submitted via simple commands. 50 bars in up to 13 colors are displayable at the same time (see figure above). The complete data chart of 50 bars can be updated more often than 18 times per second (>18 frames per second).
- **PC-Keyboard-Interface(PS/2):** keystrokes will *always* be sent out *immediately* as serial data (ASCII-/ANSI codes).
- **Data transfer/Mounting form:** no handshaking required, received data will be displayed immediately. No need for breaks in data transmission. Only some configuration commands require a break in transmission of approx. 30 ms. Connectable to RS232 by using a level converter (e.g. MAX232A). Stackable into wide DIP sockets (15,24mm).
- **Powerful command set:** includes VT100-commands like area-scrolling and -deletion, local/remote echo, convenient cursor positioning as well as special commands for the real-time-barchart-graphics.
- **Internal Clock:** soft-calibratable to a deviation of <1 second per week (assuming a constant quartz frequency). Synchronized Time readout. Display of day of week, date and time in the deactivatable separate status line.
- **Monitor-Shutdown:** the monitor can be switched into an energy-saving mode (Suspend/Standby) or be reactivated by command, while the calibrated internal clock continues operation and all settings and screen content will be kept.
- **Controller-Shutdown:** the TVT-KVGA can be switched off completely by command. Average quiescent current is below 18 μ A. Reactivation of the controller by Reset. Ideal for battery-operated devices.

Technical Data:

VGA-Mode / Baudrate:

Dimensions (LxWxH), Weight:

Supply voltage

Avg. Current consumption (Vcc=5V, SYNC-Imp. 2,1K)

640 x 480, 60 Hz / 9600 Baud 8N1

approx. 3 x 2 x 1(1.4 incl. contacts) cm, 10g

4.6 - 5.4 V

Operating: typ. 25-32 mA/ Shutdown: <18 μ A

Befehlssatz-Übersicht / Command set overview

ESC[HH;MM;SS?s

Set Time

ESC[DD;MM;YY?t

Set Date

ESC[<elem>;<col>q

Define Color No. 0..15 for Screen Elements 1..20

ESC[12h Local Echo (*)
ESC[12l Remote Echo
ESC[20h Newline Mode (*)
ESC[20l Linefeed Mode
ESC[>8h Enable Auto-LF on rec. CR
ESC[>8l Disable Auto-LF on rec. CR (*)
ESC[>9h Enable Auto-CR on rec. LF (*)
ESC[>9l Disable Auto-CR on rec. LF
ESC[>19h BACKSPACE sends BS-SPC-BS
ESC[>19l BACKSPACE sends BS (*)
ESC[?15h Switch off Status Lines (**)
ESC[?15l Switch on Status Lines (**)
ESC[?16h Switch Screen Area off
ESC[?16l Switch Screen Area on (*)
ESC[z Returns to Power-up configuration without interrupting Clock operation or changing current Calibration value

ESC[1n Report Time
ESC[2n Report Date
ESC[6n Report Cursor Position

Barchart Graphics Commands

1 (or 2) Set X-Axis Position (e.g. 1M)
3 Transfer Graph Data
4 Define Bar colors
5 Define Headline Text
6 Define Y-axis Text
7 Define X-axis Text

(*) marks DEFAULT settings

(**) DEFAULT value depends on STA level

„ESC“ is ASCII code 27 (\$1B)

ESC[s Save Cursor position
ESC[u Restore Cursor position
ESC[#A Cursor # positions up
ESC[#B Cursor # positions down
ESC[#C Cursor # positions right
ESC[#D Cursor # positions left
ESC[x;yf Set Cursor to hor/vert position
ESC[x;yH Set Cursor to hor/vert position
ESC[>5h Cursor invisible
ESC[>5l Cursor visible (*)
ESC[>11h Cursor static
ESC[>11l Cursor blinking (*)
ESC[#J Erase in Display (Parameter #)
0: Erase Display from cursor position
1: Erase Display till cursor position
2: Erase entire Display
3: Cursor home & Erase entire Display
ESC[#K Erase in line (Parameter #)
0: Erase line from cursor position
1: Erase line till cursor position
2: Erase entire line
ESC[#P Delete # characters on the right
ESC[#M Erase # characters on the left
ESC[?7h Auto wrap mode on (*)
ESC[?7l Auto wrap mode off
ESC[Pt;Pbr Define Scrolling Region
ESC[?6h Select HOME pos. in scrolling region
ESC[?6l Select normal HOME position (*)
ESC[S Scroll Screen Content one Line up
ESC[T Scroll Screen Content one Line down
ESC[=h Switch to Barchart Grafix Mode
ESC[=l Switch to Text Mode (*)
ESC[#V Energy saving Modes (Parameter #)
0: Controller Shutdown
1: Monitor Suspend Mode
2: Monitor Standby Mode
3: Normal Operation (*)
ESC[<#h Add # to default calibration value
ESC[<#l Subtract # from default calibration value

Localized versions supporting different national keyboard layouts are available for Germany(GR), France(FR), Italy(IT), Spain(SP), United Kingdom(UK) and United States(US)

1 Item	TVT-KVGA	GR/FR/IT/SP/UK/US Keyboard layouts	28,70 € incl. 19% VAT
5 Items	TVT-KVGA	GR/FR/IT/SP/UK/US Keyboard layouts	135,50 € incl. 19% VAT
10 Items	TVT-KVGA	GR/FR/IT/SP/UK/US Keyboard layouts	259,00 € incl. 19% VAT

All offers are subject to confirmation. Deliveries within EU outside of Germany require payment in advance. Shipping costs: 5,80 Euro (including insurance). If you need higher quantities or custom versions, please contact us using the address stated below, per Fax or by Email to

info@tvterminal.de

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