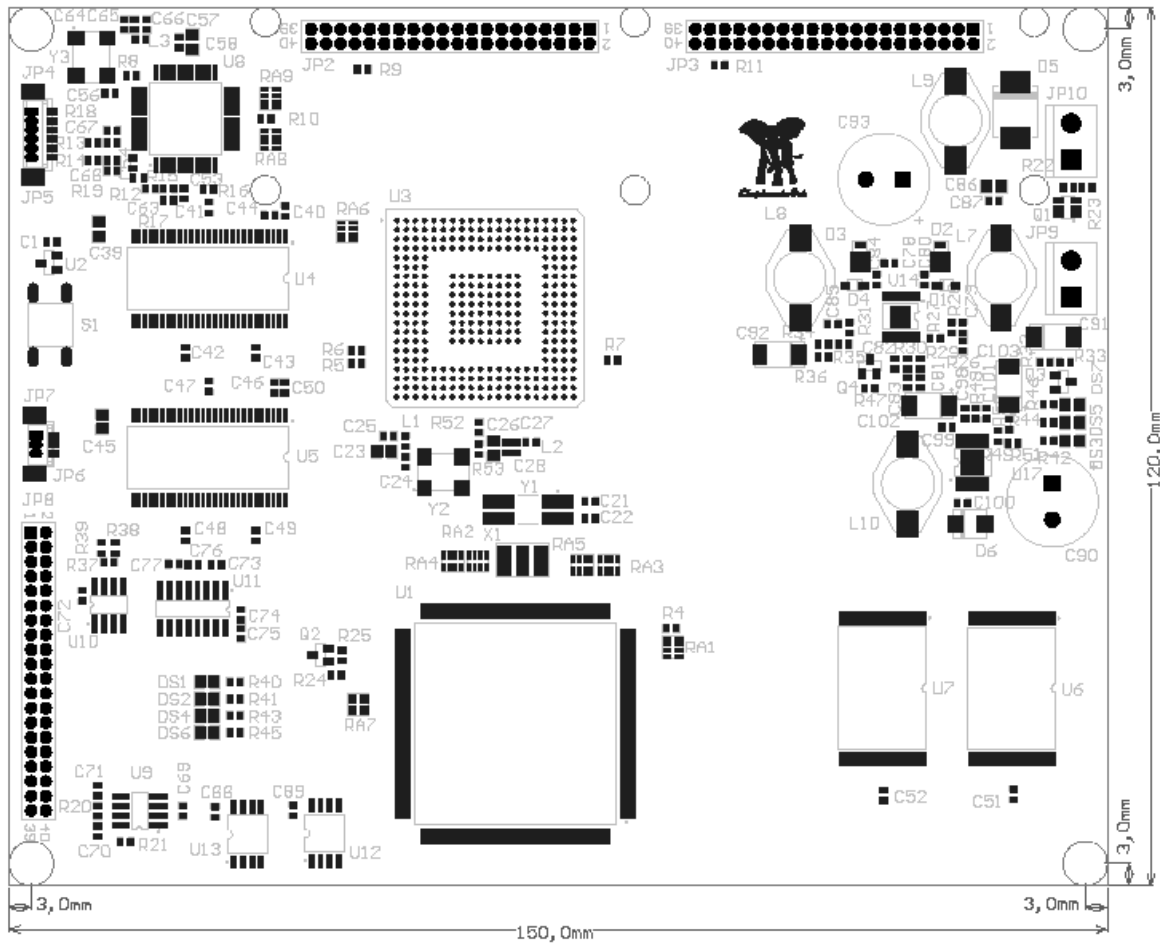


BOARD



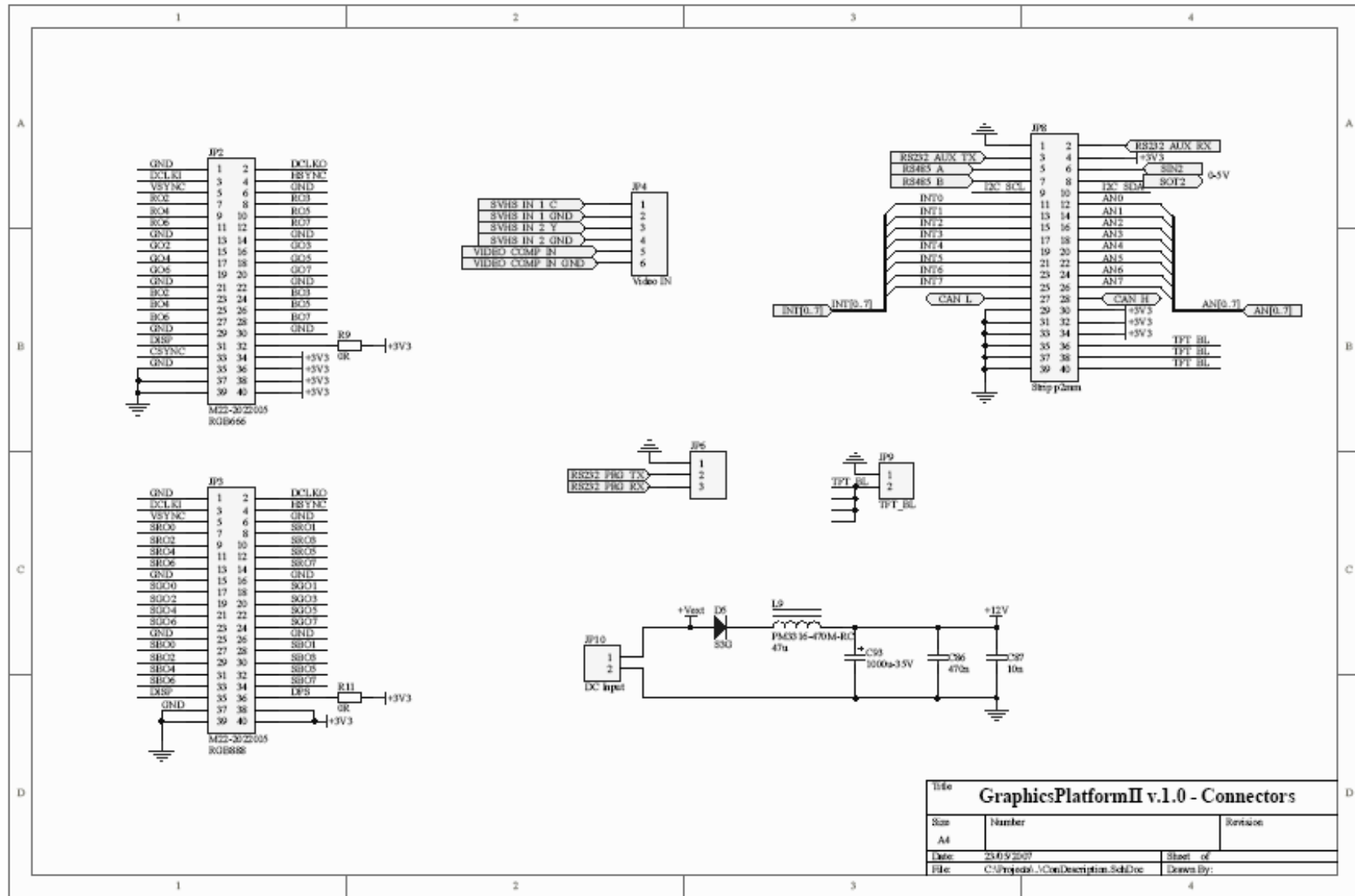
Description

The GraphicPlatformII board is all what you need for developing with Fujitsu GDC Lime and Fujitsu microcontroller MB91F467.

Technical characteristics:

- Microcontroller MB91F467DA
- GDC MB86276GA (LIME)
- 32MB video SDRAM
- 1MB SDRAM (optional, useful for Fujitsu monitor debugger)
- 128Mbit Flash
- 1Mbit EEPROM
- n° 2 RS232 interface
- RS485 interface
- CAN interface
- RGB888 digital video output
- RGB666 digital video output
- n°3 analog video input selectable (via I2C command)
- expansion connector (analog input, INT input, I2C interface, USART interface, etc... see connector description)
- LCD backlight power 1A
- SD Card interface (not yet fully implemented)

GraphicPlatformII.doc



| | | |
|---------------------------------------|-------------------------------------|-----------|
| Title | | |
| GraphicsPlatformII v.1.0 - Connectors | | |
| Size | Number | Revision |
| A4 | | |
| Date | 2009/2007 | Sheet of |
| File | C:\Project\...ConDescription.SchDoc | Drawn By: |

| JP2 – RGB666 out | | | |
|------------------|-------|-----|---------|
| PIN | DESC | PIN | DESC |
| 1 | GND | 21 | GND |
| 2 | DCLKO | 22 | GND |
| 3 | DCLKI | 23 | BO2 |
| 4 | HSYNC | 24 | BO3 |
| 5 | VSYNC | 25 | BO4 |
| 6 | GND | 26 | BO5 |
| 7 | RO2 | 27 | BO6 |
| 8 | RO3 | 28 | BO7 |
| 9 | RO4 | 29 | GND |
| 10 | RO5 | 30 | GND |
| 11 | RO6 | 31 | DISP |
| 12 | RO7 | 32 | SETTING |
| 13 | GND | 33 | CSYNC |
| 14 | GND | 34 | +3V3 |
| 15 | GO2 | 35 | GND |
| 16 | GO3 | 36 | +3V3 |
| 17 | GO4 | 37 | GND |
| 18 | GO5 | 38 | +3V3 |
| 19 | GO6 | 39 | GND |
| 20 | GO7 | 40 | +3V3 |

| JP3 – RGB888 out | | | |
|------------------|-------|-----|------|
| PIN | DESC | PIN | DESC |
| 1 | GND | 21 | SGO4 |
| 2 | DCLKO | 22 | SGO5 |
| 3 | DCLKI | 23 | SGO6 |
| 4 | HSYNC | 24 | SGO7 |
| 5 | VSYNC | 25 | GND |
| 6 | GND | 26 | GND |
| 7 | SRO0 | 27 | SBO0 |
| 8 | SRO1 | 28 | SBO1 |
| 9 | SRO2 | 29 | SBO2 |
| 10 | SRO3 | 30 | SBO3 |
| 11 | SRO4 | 31 | SBO4 |
| 12 | SRO5 | 32 | SBO5 |
| 13 | SRO6 | 33 | SBO6 |
| 14 | SRO7 | 34 | SBO7 |
| 15 | GND | 35 | DISP |
| 16 | GND | 36 | DPS |
| 17 | SGO0 | 37 | GND |
| 18 | SGO1 | 38 | +3V3 |
| 19 | SGO2 | 39 | GND |
| 20 | SGO3 | 40 | +3V3 |

| JP4 – analog video in | |
|-----------------------|----------------------------|
| PIN | DESC |
| 1 | VideoIN1 (SAA7113 ch AI21) |
| 2 | Analog GND |
| 3 | VideoIN2 (SAA7113 ch AI11) |
| 4 | Analog GND |
| 5 | VideoIN3 (SAA7113 ch AI12) |
| 6 | Analog GND |

| JP6 – Program connector | |
|-------------------------|--------------------------------|
| PIN | DESC |
| 1 | GND |
| 2 | TX (micro Uart4 TX) RS232level |
| 3 | RX (micro Uart4 RX) RS232level |

| JP10 – DC power input | |
|-----------------------|------|
| PIN | DESC |
| 1 | +12V |
| 2 | GND |

| JP10 – DC power output | |
|------------------------|----------------|
| PIN | DESC |
| 1 | GND |
| 2 | +TFT BACKLIGHT |

| JP8 – expansion connector | |
|---------------------------|--|
| PIN | DESC |
| 1 | GND |
| 2 | RS232 AUX RX (micro Uart5 RX) – RS232 level |
| 3 | RS232 AUX TX (micro Uart5 TX) – RS232 level |
| 4 | +3V3 |
| 5 | RS485A |
| 6 | SIN2 (micro Uart2 RX) – TTL level |
| 7 | RS485B |
| 8 | SOT2 (micro Uart2 TX) – TTL level |
| 9 | I2C SCL (micro PIN SCL0) |
| 10 | I2C SDA (micro PIN SDA0) |
| 11 | INT0 (micro PIN INT0) |
| 12 | AN0 (micro PIN AN0) |
| 13 | INT1 (micro PIN INT1) |
| 14 | AN1 (micro PIN AN1) |
| 15 | INT2 (micro PIN INT2) |
| 16 | AN2 (micro PIN AN2) |
| 17 | INT3 (micro PIN INT3) |
| 18 | AN3 (micro PIN AN3) |
| 19 | INT4 (micro PIN INT4) |
| 20 | AN4 (micro PIN AN4) |
| 21 | INT5 (micro PIN INT5) |
| 22 | AN5 (micro PIN AN5) |
| 23 | INT6 (micro PIN INT6) |
| 24 | AN6 (micro PIN AN6) |
| 25 | INT7 (micro PIN INT7) |
| 26 | AN7 (micro PIN AN7) |
| 27 | CAN L (micro CAN CH 2 – RX2_TX2) |
| 28 | CAN H (micro CAN CH 2 – RX2_TX2) |
| 29 | GND |
| 30 | +3V3 |
| 31 | GND |
| 32 | +3V3 |
| 33 | GND |
| 34 | +3V3 |
| 35 | GND |
| 36 | TFT_OUT_BL (TFT Backlight power controlled by micro PIN P15_1) |
| 37 | GND |
| 38 | TFT_OUT_BL (TFT Backlight power controlled by micro PIN P15_1) |
| 39 | GND |
| 40 | TFT_OUT_BL (TFT Backlight power controlled by micro PIN P15_1) |

Note

- TFT Backlight power controlled by micro PIN P15_1 is equal to +Vext when P15_1=1;
- +Vext = +12V DC
- LED0-3 are connected to PIN P16_0- P16_3 directly

Other settings

| MICRO CS | |
|----------|-------------|
| PIN | DESC |
| CS0 | U3 - LIME |
| CS1 | |
| CS2 | U6 – Flash |
| CS3 | U7 – Flash |
| CS4 | |
| CS5 | |
| CS6 | U15 - SDRAM |
| CS7 | U16 - SDRAM |

| MICRO general used Pin description | |
|------------------------------------|---|
| PIN | DESC |
| P16_0 | LED0 |
| P16_1 | LED1 |
| P16_2 | LED2 |
| P16_3 | LED3 |
| P15_0 | Power enable (1:ON) – enable +3V3aux and +1V8 |
| P15_1 | Enable TFT backLight |
| P15_2 | LIME S |
| P15_3 | LIME XRST |
| P14_0 | Flash Reset (0: Reset ON) |
| P14_3 | Enable RS485 TX (1: TX enabled) |
| P14_4 | Enable RS485 RX (0: RX enabled) |
| P14_0 | CAN interface shutdown (1: CAN disabled) |

Useful video conversion board:

- GPIIA10-LVDS: converts Digital video RGB666 and RGB888 into LVDS format
- GPIIA10-VGA: converts Digital video RGB666 and RGB888 into analog video format

Contacts:

Italy

ElephantArt

Tel. +39.349.42.54.864

Fax. +39.0363.33.71.36

info@elephantart.it

<http://www.elephantart.it>