

clk_32to25_dcm

clk CLK_IN1 CLK_OUT1

Gameduino

clk_25Mhz

VGA Pins
(Optional)

Note: Don't use both VGA options.

VGA Bus
(Preferred)

Audio

AUDIOL
AUDIOR

ARD_SPI_SCLK
ARD_SPI_MOSI
ARD_SPI_MISO
ARD_SPI_SS

SCK
MOSI
SSEL

SPI Pins to Arduino
(Required)

MISO ARD_SPI_MISO

flashMISO

SPI Pins to Flash Memory
(Optional)

Only used by Forth processor in rare situations.

flashMOSI
flashSCK
flashSSEL
AUX

Gameduino
by: James Bowman

gpio_bus_in(200:0)
gpio_bus_out(200:0)

VGA Pins
(Optional)

VGA_Hsync
VGA_Vsync
VGA_Red3
VGA_Red2
VGA_Red1
VGA_Red0
VGA_Green3
VGA_Green2
VGA_Green1
VGA_Green0
VGA_Blue3
VGA_Blue2
VGA_Blue1
VGA_Blue0

VGA_Bus(32:0)

VGA Bus
(Preferred)

Note: Don't use both
VGA options.

RS232_RX
RS232_TX
SD_MISO
SD_CD
PS2_DAT1
PS2_CLK1
JOYSTICK1_5
JOYSTICK1_9

JOYSTICK1_4
JOYSTICK1_3
JOYSTICK1_7
JOYSTICK1_2
JOYSTICK1_6
JOYSTICK1_1

SW_RIGHT
SW_DOWN
RESET
SW_UP
SW_LEFT
SD_nCS
SD_SCK
SD_MOSI

Arduino_20
Arduino_18
Arduino_17
Arduino_16
Arduino_15
Arduino_14

microSD Card

SD_MISO
SD_MOSI
SD_SCK

VGA_HSYNC
VGA_VSYNC
VGA_BLUE0
AUDIO1_LEFT
AUDIO1_RIGHT
VGA_BLUE1
VGA_BLUE2
VGA_BLUE3

Arduino_22
Arduino_24
Arduino_26
Arduino_28
Arduino_30
Arduino_32
Arduino_34
Arduino_36

RS232 UART

RS232_RX
RS232_TX

VGA_GREEN0
VGA_GREEN1
VGA_GREEN2
VGA_GREEN3
VGA_RED3
VGA_RED2
VGA_RED1
VGA_RED0

Arduino_38
Arduino_40
Arduino_42
Arduino_44
Arduino_46
Arduino_48
Arduino_50
Arduino_52

Audio1

Audio1_Left
Audio1_Right

Audio2

Audio2_Left
Audio2_Right

LED4
LED3
LED2
LED1
AUDIO2_LEFT
AUDIO2_RIGHT
PS2_DAT2
PS2_CLK2

Arduino_53
Arduino_51
Arduino_49
Arduino_47
Arduino_45
Arduino_43
Arduino_41
Arduino_39

JOYSTICK2_9
JOYSTICK2_7
JOYSTICK2_6
JOYSTICK2_1
JOYSTICK2_2
JOYSTICK2_3
JOYSTICK2_4
JOYSTICK2_5

Arduino_37
Arduino_35
Arduino_33
Arduino_31
Arduino_29
Arduino_27
Arduino_25
Arduino_23

Papilio DUO Computing Shield Pinout

Version: 1.0

Arduino_21 INV ARD_RESET

Press the 'Right' button to reset the AVR

Spartan6_Reset

Arduino_19 reset

Press the 'Reset' button to reset the FPGA

Replace DUO_SW1 with a Pulldown if you want the ATmega32U4 chip to run when this circuit is loaded.
Replace DUO_SW1 with a Pullup if you want to disable the ATmega32U4 chip when this circuit is loaded.

Papilio DUO Reset