3D 2Go Kit P2B6 XMC1100 in VQFN24 V1.0

On-board Debugger including a UART to USB Bridge

PinHeader XMC1100

TSSOP-16 Pinout

X1: PINHD 8x1 0,1" TH — P2.7/P2.8, P2.9, P2.10, P2.11, GND, +3V3, P0.0, P0.5

X2: PINHD 8x1 0,1" TH — P2.6, P2.0, P0.15, P0.14, P0.9, P0.8, P0.7, P0.6

Target Device (XMC1100)

S1: TLE493DP2B6 (VDD, GND, SCL, SDA)

R3 1k2/0402, R4 1k2/0402, 47R/0402 R5, 47R/0402 R6, C3 100nF/0402, C4 47pF/0402

P1.0/VDDSENS, P2.11, P2.10

IC1: XMC1100_VQFN24

P0.0, P0.5, P0.6, P0.7, P0.8, P0.9, P0.12/LED1, P0.13, P0.14, P0.15, P1.0/VDDSENS, P1.1/LED2, P1.2/SWCLK, P1.3/SWD, P2.0, RX_XMC4200, TX_XMC4200, P2.6, P2.7/P2.8, P2.9, P2.10, P2.11

Supply: VDD, VSS, EXP

+3V3, C1 100nF/0402, C2 100nF/0402, GND

Power Supply

+5V, C301 100nF/0402, IC201 TLS202B1MB V33 (IN, EN, GND1, GND2, OUT), C302 10uF/0603, +3V3, GND

LEDs

P1.1/LED2 — LED2 LED RT/0603

P0.12/LED1 — LED1 LED RT/0603

R1 680R/0402, R2 680R/0402, GND

Debug Connection Concept

SPI Master	U0C0
SWD DIR	GPIO-P1.3
MISO	DX0B-P1.4
MOSI	DOUT0-P1.5
CLK_OUT	SCLKOUT-P1.1
CS_OUT	SELO0-P1.0
SPI Slave	U0C1
CS_IN	DX2A-P2.3
CLK_IN	DX1A-P2.4
PULL Select	GPIO-P0.8
ADC AIN	P14.9
UART2 (DM2)	U1C0
RXD	DX0A-P0.4
TXD	DOUT0-P0.5
TX_ENABLE	GPIO-P0.7
TXACTIVE#	GPIO-P0.6
RESET#	GPIO-P0.3
DEBUG_LED#	GPIO-P0.2
AUX_LED#	GPIO-P0.1

SWD_IN, SWD_OUT, SWCLK, RXD, TXD, DEBUG_LED#

Configure wiggler-P0.5 as USIC_Tx but only active while X-spy function is selected
Configure wiggler-P0.4 as USIC_Rx but only active while X-spy function is selected

IC101: XMC4200_QFN48

Digital: P2.5, P2.4, P2.3, P2.2, P2.1, P2.0, P0.8, P0.7, P0.6, P0.5, P0.4, P0.3, P0.2, P0.1, P0.0, P1.5, P1.4, P1.3, P1.2, P1.1, P1.0

SWCLK, R102 100R/0402 (TX_XMC4200, RX_XMC4200), DEBUG_LED#, R103 100R/0402 (P1.3/SWD), SWCLK, R104 100R/0402 (P1.2/SWCLK)

+3V3, 680R/0402 R101, LED101 LED GN/0603

Analog: P14.9, P14.8, P14.7, P14.6, P14.5, P14.4, P14.3, P14.0, VAREF, VAGND

COM LED, Level Shifter, No RESET Pin, UART, SPD, SWV, JTAG, +3V3, +5V, GND, D101 BAS3010A-03W

Hibernate/RTC: RTC_XTAL_2, RTC_XTAL_1, HIB_IO_0, VBAT

USB: USB_D-, USB_D+ — R105 33R/0402, R106 33R/0402, X101C ZX62-AB-5PA

Supply: XTAL2, XTAL1, PORST#, TCK, TMS, VSS, VDDP2, VDDP1, VDDP, VDDC1, VDDC

Q101 12MHz, C110 15pF/0402, C109 15pF/0402, GND

DBG_RESET, DBG_TCK, DBG_TMS, +3V3, R109 10k/0402, SV1 PINHD 1x5 0,05" TH

D102 ESD8V0L2B-03L, X101S, R107 1M/0402, C101 100nF/0402

C106 100nF/0402, C105 100nF/0402, C108 4,7uF/0603, C104 100nF/0402, C103 100nF/0402, C102 100nF/0402, C107 10uF/0603

Legal Disclaimer

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

3D 2Go P2B6 V1.0	
TLE493D_P2B6_2go_v1	
05.03.2021 15:13	
Sheet: 1/1	