TODO: PA7 not assigned in TQFP-64 STM32F0.

TODO: FPGA clocks and PLLs.

| | USED | 6 | 20 | 20 | 18 | 60 | 38 | 22 | | | 115 | |
| | FREE | 0 | | | | | | | | | 0 | |

XO2 columns group under "XO2 256 I/O" (XO2 32 PIN, XO2 32 BANK) and "XO2 4000 I/O" (XO2 144 PIN, XO2 144 BANK).

F0-32 PIN	F0-48 PIN	P0-64 PIN	F4-100 PIN	F4-144 PIN	FMC	FMC function	DCMI	LCD	Arduino PWM	ELL-i external function	Ell-i conn. pin	JTAG	Ard	ELL	DIP	MEM	DDR2	XO2 32	XO2 32 PIN	XO2 32 BANK	XO2 144	XO2 144 PIN	XO2 144 BANK
PA 0	PA 0	PA 0	PA 0	PA 0						**Arduino A 0**	11		1										
PA 2	PA 2	PA 2	PF 6	PF 6	FMC_NIORD	PC Card				**Arduino A 1** / 051: COMP2_INM	9		1										
PA 4	PA 4	PA 4	PA 4	PA 4						**Arduino A 2** / DAC1_OUT	7		1										
PA 5	PA 5	PA 5	PA 5	PA 5						**Arduino A 3** / DAC2_OUT	5		1										
PB 7	PB 9	PB 9	PB 7	PB 9			DCMI_D 7)	LCD_B7		Arduino A 4 / **SDA**	3		1					1	27 PT8D SDA/PCLK	0	1	125 PT20D **SDA/PCLKC0**	0
PB 6	PB 6	PB 6	PB 6	PB 6	FMC_SDNE1	SDRAM	DCMI_D 6)--			Arduino A 5 / **SCL**	1		1		1			1	28 PT8C SCL/PCLK	0	1	126 PT20C **SCL/PCLKT0**	0
PA10	PA10	PA10	PA10	PA10			DCMI_D 1)		TIM1_CH3	Arduino D 0 / **USART1 RX**	24		1	1								1	59 PB23A	2
PA 9	PA 9	PA 9	PA 9	PA 9			DCMI_D 0)		TIM1_CH2	Arduino D 1 / **USART1 TX**	26		1	1								1	60 PB23B	2
PA 7	PA 7	PA 7	PD 2	PD 2			DCMI_D11)		(TIM3_ETR/TIM	**Arduino D 2**	28		1	1								1	127 PT18B **PCLKC0_1**	0
PA11	PA11	PA11	PA11	PA11				LCD_R4	TIM1_CH4	Arduino D 3 **(PWM)** / CAN1_RX / USART1_CTS / DONE	30		1	1				1	23 PT9D **DONE**		1	109 PT28D **DONE**	0
PA12	PA12	PA12	PA12	PA12				LCD_R5	(TIM1_ETR)	Arduino D 4 / CAN1_TX / USART1_RTS / INITN	32		1	1					--	--	--	1	110 PT28C **INITN**	0
PB 1	PB 1	PB 1	PB 1	PB 1				LCD_R6)++	TIM3_CH4	Arduino D 5 **(PWM)**	31	1	1	1								1	55 PB20A **PCLKT2_1**	2
PA 3	PA 3	PA 3	PA 3	PA 3				LCD_B5	TIM9_CH2/TIM	Arduino D 6 **(PWM)** / 051: COMP2_INP	29		1	1								1	56 PB20B **PCLKC2_1**	2
PB 4	PB 8	PB 8	PB 8	PB 8	FMC_INT2	NAND	DCMI_D12)	LCD_R7)		**Arduino D 7**	27		1	1								1	52 PB15A	2
PB 2	PB 7	PB 7	PG 6	PG 6						Arduino D 8 (For LQFP32, PB2 also used for **SN**)	25		1	1	1							1	54 PB15B	2
PB 0	PB 0	PB 0	PB 0	PB 0				LCD_R3	TIM3_CH3	Arduino D 9 **(PWM)**	23		1	1				1	20 PR5B **PCLKC1_0**	1	1	133 PT14A	0
PA15	PA15	PA15	PA15	PA15			DCMI_HSYNC	LCD_VSYNC		Arduino D10 **SS** (PWM) / JTDI<-JTDO	21	1	1	1				1	1 PT6C **TDO**		1	137 PT13C **TDO**	0
PB 5	PB 5	PB 5	PB 5	PB 5	FMC_SDCKE1	SDRAM	DCMI_D10)--		TIM3_CH2	Arduino D11 / **MOSI** (PWM) / CAN2_RX	19		1	1	1			1	17 PB9B **SI**	2	1	71 PB30B **SI**	2
PA 6	PA 6	PA 6	PA 6	PA 6			DCMI_PIXCLK	LCD_G2	TIM13_CH1/TIM	Arduino D12 / **SPI1_MISO**	17		1	1				1	10 PB2D **SO**	2	1	45 PB9B **SO**	2
PB 3	PB 3	PB 3	PB 3	PB 3					TIM2_CH2	Arduino D13 / **SCK** / JTDO from STM32F4	15	1	1	1				1	9 PB2C **CCLK**	2	1	44 PB9A **CCLK**	2
			PF 4	PF 8	FMC_NIOWR	PC Card				**ELL-i E 0 LVDS 1T**	33			1	1			1	11 PB4A	2	1	141 PT10A	0
			PF 5	PF 9	FMC_CD	PC Card				**ELL-i E 1 LVDS 1C**	35			1	1			1	12 PB4B	2	1	140 PT10B	0
			PF 6	PF 7	FMC_NREG	PC Card				**ELL-i E 2 LVDS 2T**	37			1	1			1	13 PB4C	2	1	139 PT11A	0
			PF 7	PF10	FMC_INTR	PC Car	DCMI_D11)--	LCD_DE)		**ELL-i E 3 LVDS 2C**	39			1	1			1	14 PB4D	2	1	138 PT11B	0
			PC 0	XX						**ELL-i E 4 LVDS 3T**	41			1	1							1	122 PT21A	0
			PC 1	XX						**ELL-i E 5 LVDS 3C**	43			1	1							1	121 PT21B	0
			PC 2	XX						**ELL-i E 6 LVDS 4T**	45			1								1	112 PT27A	0
			PC 3	XX						**ELL-i E 7 LVDS 4C**	47			1								1	111 PT27B	0
			PC 4	PG 7	FMC_INT3	NAND	DCMI_D13)	LCD_CLK)		**ELL-i E 8 LVDS 5T**	49			1								1	114 PT25A	0
			PC 5	XX						**ELL-i E 9 LVDS 5C**	51			1								1	113 PT25B	0
--	--	PC 7	PC 7	PC 7			DCMI_D 1)	LCD_G6		**ELL-i E10 LVDS 6T**	53			1								1	143 PT9A	0
--	--	PC 6	PC 6	PC 6			DCMI_D 0)	LCD_HSYNC		**ELL-i E11 LVDS 6C**	55			1								1	142 PT9B	0
--	PB11	PB11	--	PB11				LCD_G5		**ELL-i E12 I2C2 SDA**	57			1	1			1	4 PL5C	3	1	115 PT24B	0
--	PB10	PB10	PB10	PB10				LCD_G4		**ELL-i E13 I2C2 SCL**	59			1	1			1	5 PL5D	3	1	117 PT24A	0
--	PB12	PB12	PB 9	PB12						**ELL-i E14 SPI2 SS / CAN2_RX**	60			1								1	65 PB27A	2
--	PB15	PB15	PB15	PB15						**ELL-i E15 SPI2 MOSI**	58			1								1	69 PB29B	2
--	PB14	PB14	PB14	PB14						**ELL-i E16 SPI2 MISO**	56			1								1	68 PB29A	2
--	PB13	PB13	PB10	PB13						**ELL-i E17 SPI2 SCK / CAN2_TX**	54			1								1	67 PB27B	2
--	--	PC11	PC11	PC11			DCMI_D 4			**ELL-i E18 USART3 RX (F4-only)**	52			1								1	58 PB21B	2
--	--	PC10	PC10	PC10			DCMI_D 8	LCD_R2		**ELL-i E19 USART3 TX (F4-only)**	50			1								1	57 PB21A	2
PA 1	PA 1	PA 1	--	--						**ETH ENC28J60 intrerrupt**													
--	--	--	PA 7	PA 7				LCD_R6)--		**ETH_RMII_CRS_DV**													
--	--	--	PC 1	PC 1						**ETH_RMII_MDC**													
--	--	--	PA 2	PA 2						**ETH_RMII_MDIO**													
--	--	--	PA 1	PA 1						**ETH_RMII_REF_CLK**													
--	--	--	PC 4	PC 4						**ETH_RMII_RXD0**													
--	--	--	PC 5	PC 5						**ETH_RMII_RXD1**													
			PB12	PG13						**ETH_RMII_TXD0**													
			PB13	PG14						**ETH_RMII_TXD1**													
			PB11	PG11	FMC_NCE4_2	Chip se	DCMI_D 3)--	LCD_B3)--		**ETH_RMII_TXEN**													
--	--	PC12	PC12	PC12			DCMI_D 9			**Internal CSSPIN / DMCI_D9**							1	8 PB2A **CSSPIN**	2	1	40 PB4A **CSSPIN**	2
PA 8	PA 8	PA 8	PA 8	PA 8				LCD_R6)--	TIM1_CH1	**Internal MCO**							1	21 PR5A **PCLKT1_0**	1	1	128 PT18A **PCLKT0_1**	0
--	--	PC 8	PC 8	PC 8			DCMI_D 6)			**Internal PROGRAMN**							1	25 PT9B **PROGRAMN**		1	119 PT23D **PROGRAMN**	0
PB 2	PB 2	PB 2	PB 2	PB 2			DCMI_D 6)	LCD_B6		**Internal SN / DMCI_D6 / LCD_B6 (Arduino D8 for LQFP32)**							1	16 PB9A **SN**	2	1	70 PB30A **SN**	2
PA14	PA14	PA14	PA14	PA14						**JTAG JTCK / SWCLK**		1					1	30 PT7A **TCK**	0	1	131 PT15C **TCK**	0
--	--	PC 9	PC 9	PC 9						**JTAG JTDI to MachXO2**		1					1	32 PT6D **TDI**	0	1	136 PT13D **TDI**	0
PA13	PA13	PA13	PA13	PA13						**JTAG JTMS / SWDIO**		1					1	29 PT7B **TMS**	0	1	130 PT15D **TMS**	0
PB 4	PB 4	PB 4	PB 4	PB 4					--	**JTAG NJTRST/JTAGENB**		1					1	26 PT9A **JTAGENB**	0	1	120 PT23C **JTAGENB**	0
			PD14	PD14	**FMC_D 0**					MEM ADDR / DATA 0						1					1	1 PL3A	5
			PD15	PD15	**FMC_D 1**					MEM ADDR / DATA 1						1					1	2 PL3B	5
			PD0	PD0	**FMC_D 2**					MEM ADDR / DATA 2						1					1	3 PL4A	5
			PD1	PD1	**FMC_D 3**					MEM ADDR / DATA 3						1					1	4 PL4B	5
			PE 7	PE 7	**FMC_D 4**					MEM ADDR / DATA 4						1					1	5 PL6A	5
			PE 8	PE 8	**FMC_D 5**					MEM ADDR / DATA 5						1					1	6 PL6B	5
			PE 9	PE 9	**FMC_D 6**					MEM ADDR / DATA 6						1					1	9 PL7A	5
			PE10	PE10	**FMC_D 7**					MEM ADDR / DATA 7						1					1	10 PL7B	5
			PE11	PE11	**FMC_D 8**			LCD_G3		MEM ADDR / DATA 8						1					1	11 PL8A	5
			PE12	PE12	**FMC_D 9**			LCD_B4		MEM ADDR / DATA 9						1					1	12 PL8B	5
			PE13	PE13	**FMC_D10**			LCD_DE)		MEM ADDR / DATA10						1					1	20 PL10D PCLKC4_0	4
			PE14	PE14	**FMC_D11**			LCD_CLK)		MEM ADDR / DATA11						1					1	19 PL10C **PCLKT4_0**	4
			PE15	PE15	**FMC_D12**			LCD_R7)++		MEM ADDR / DATA12						1					1	15 PL10A	4
			PD 8	PD 8	**FMC_D13**					MEM ADDR / DATA13						1					1	17 PL10B	4
			PD 9	PD 9	**FMC_D14**					MEM ADDR / DATA14						1					1	13 PL9A	4
			PD10	PD10	**FMC_D15**			LCD_B3)		MEM ADDR / DATA15						1					1	14 PL9B	4
				PF 0	FMC_A 0					MEM ADDR 0						1							
				PF 1	FMC_A 1					MEM ADDR 1						1							
				PF 2	FMC_A 2					MEM ADDR 2						1							
				PF 3	FMC_A 3					MEM ADDR 3						1							
				PF 4	FMC_A 4					MEM ADDR 4						1							
				PF 5	FMC_A 5					MEM ADDR 5						1							
				PF12	FMC_A 6					MEM ADDR 6						1							
				PF13	FMC_A 7					MEM ADDR 7						1							
				PF14	FMC_A 8					MEM ADDR 8						1							
				PF15	FMC_A 9					MEM ADDR 9						1							
				PG 0	FMC_A10					MEM ADDR10						1							
				PG 1	FMC_A11					MEM ADDR11						1							
				PG 2	FMC_A12					MEM ADDR12						1							
				PG 3	FMC_A13					MEM ADDR13						1							
				PG 4	FMC_A14					MEM ADDR14						1							
				PG 5	FMC_A15					MEM ADDR15						1							
			PD11	PD11	**FMC_A16**					MEM ADDR16						1					1	21 PL13A	4
			PD12	PD12	**FMC_A17**					MEM ADDR17						1					1	22 PL13B	4
			PD13	PD13	**FMC_A18**					MEM ADDR18						1					1	23 PL14A	4
			PE 3	PE 3	**FMC_A19**					MEM ADDR19						1					1	24 PL14B	4
			PE 4	PE 4	**FMC_A20**		DCMI_D 4	LCD_B0		MEM ADDR20						1					1	41 PB4B	2
			PE 5	PE 5	**FMC_A21**		DCMI_D 6)	LCD_G0		MEM ADDR21						1					1	42 PB7A	2
			PE 6	PE 6	**FMC_A22**		DCMI_D 7)	LCD_G1		MEM ADDR22						1					1	61 PB24A	2
				PE 2	**FMC_A23**					MEM ADDR23						1					1	62 PB24B	2
			PD 7	PD 7	**FMC_NE1**/NCE2	Chip select				MEM CHIP SELECT 1						1					1	50 PB13B	2
				PG 9	**FMC_NE2**/NCE3	Chip select				MEM CHIP SELECT 2						1							
				PG10	**FMC_NE3**/NCE4	Chip se	DCMI_D 2)	LCD_B2)--		MEM CHIP SELECT 3						1							
				PG12	**FMC_NE4**	Chip select		LCD_B1		MEM CHIP SELECT 4						1					1	63 PB24D	2
--	--	--	PC 0	PC 0	**FMC_SDNWE**	SDRAM				MEM CTRL SDRAM						1							
--	--	--	PC 2	PC 2	**FMC_SDNE0**	SDRAM (opt)		--		MEM CTRL SDRAM						1							
--	--	--	PC 3	PC 3	**FMC_SDCKE0**	SDRAM (opt)				MEM CTRL SDRAM						1							
				PF11	**FMC_SDNRAS**	SDRAM	DCMI_D12)			MEM CTRL SDRAM						1							
				PG 8	**FMC_SDCLK**	SDRAM				MEM CTRL SDRAM						1							
				PG15	**FMC_SDNCAS**	SDRAM	DCMI_D13)			MEM CTRL SDRAM						1							
--	--	--	PB 7	PB 7	**FMC_NL/NADV**	NOR/P	DCMI_VSYNC			MEM CTRL SRAM						1					1	43 PB7B	2
			PD 3	PD 3	**FMC_CLK**	NOR/P	DCMI_D 5)++	LCD_G7		MEM CTRL SRAM						1					1	49 PB13A **PCLKT2_0**	2
			PD 4	PD 4	**FMC_NOE**	NOR/PSRAM/SDRAM				MEM CTRL SRAM/SDRAM						1					1	47 PB10A	2
			PD 5	PD 5	**FMC_NWE**	NOR/PSRAM/SDRAM				MEM CTRL SRAM/SDRAM						1					1	48 PB10B	2
			PD 6	PD 6	**FMC_NWAIT**	NOR/P	DCMI_D10)++	LCD_B2)++		MEM CTRL SRAM/SDRAM						1					1	132 PT14B	0
			PE 0	PE 0	**FMC_NBL0**	SRAM/	DCMI_D 2)			MEM CTRL SRAM/SDRAM						1					1	38 PB3A	2
			PE 1	PE 1	**FMC_NBL1**	SRAM/	DCMI_D 3)			MEM CTRL SRAM/SDRAM						1					1	39 PB3B	2
					XX					MEM DDR2 ADDR							1				1	89 PR10C	1
					XX					MEM DDR2 ADDR							1				1	87 PR10D	1
					XX					MEM DDR2 ADDR							1				1	86 PR13A	1
					XX					MEM DDR2 ADDR							1				1	85 PR13B	1
					XX					MEM DDR2 ADDR							1				1	84 PR14A	1
					XX					MEM DDR2 ADDR							1				1	83 PR14B	1
					XX					MEM DDR2 ADDR							1				1	82 PR15A	1
					XX					MEM DDR2 ADDR							1				1	81 PR15B	1
					XX					MEM DDR2 ADDR							1				1	78 PR16A	1
					XX					MEM DDR2 ADDR							1				1	77 PR16B	1
					XX					MEM DDR2 ADDR							1				1	76 PR17A	1
					XX					MEM DDR2 ADDR							1				1	75 PR18A	1
					XX					MEM DDR2 ADDR							1				1	74 PR19A	1
					XX					MEM DDR2 ADDR							1				1	73 PR19B	1
					XX					MEM DDR2 ADDR							1				1	96 PR8A DQ0	1
					XX					MEM DDR2 ADDR							1				1	95 PR8B DQ0	1
					XX					MEM DDR2 CTRL							1				1	25 PL16A	3
					XX					MEM DDR2 CTRL							1				1	26 PL16B	3
					XX					MEM DDR2 CTRL							1				1	27 PL17A PCLKT3_0	3
					XX					MEM DDR2 CTRL							1				1	28 PL17B PCLKTC_0	3
					XX					MEM DDR2 CTRL							1				1	31 PL18D	3
					XX					MEM DDR2 CTRL							1				1	32 PL19A	3
					XX					MEM DDR2 CTRL							1				1	33 PL19B	3
					XX					MEM DDR2 CTRL							1				1	34 PL20A	3
					XX					MEM DDR2 CTRL							1				1	35 PL20B	3
					XX					MEM DDR2 CTRL							1				1	103 PR4C	1
					XX					MEM DDR2 CTRL **CLK**							1				1	92 PR10A **PCLKT1_0**	1
					XX					MEM DDR2 CTRL CLK							1				1	91 PR10B PCLKC1_0	1
					XX					MEM DDR2 DATA							1				1	107 PR2A DQ0	1
					XX					MEM DDR2 DATA							1				1	106 PR2D DQ0	1
					XX					MEM DDR2 DATA							1				1	105 PR3A DQ0	1
					XX					MEM DDR2 DATA							1				1	104 PR3B DQ0	1
					XX					MEM DDR2 DATA							1				1	100 PR5A DQ0	1
					XX					MEM DDR2 DATA							1				1	99 PR5B DQ0	1
					XX					MEM DDR2 DATA							1				1	98 PR6A DQ0	1
					XX					MEM DDR2 DATA							1				1	97 PR6B DQ0	1
					XX					MEM DDR2 DATA							1				1	94 PR9A DQS0N	1
					XX					MEM DDR2 DATA							1				1	93 PR9B DQS0	1