

TODO: PA7 not assigned in TQFP-64 STM32F0.
TODO: FPGA clocks and PLLs.

					USED FREE	6	20	20	16	59	38	22	0			115	0									
F0-32 PIN	F0-48 PIN	P0-64 PIN	F4-100 PIN	F4-144 PIN	FMC	FMC functi on	DCMI	LCD	Arduino PWM	ELL-i external function	ELL-i conn. pin	ELL-i name	JTAG	Ard	ELL	DIP	MEM	DDR 2	XO2 32 PIN	XO2 32 PIN	XO2 256 I/O	XO2 32 BANK	XO2 144	XO2 144 PIN	XO2 4000 I/O	XO2 144 BANK
PA 0	PA 0	PA 0	PA 0	PA 0					Arduino A 0		11 A0			1												
PA 2	PA 2	PA 2	PF 6		FMC_NIORD	PG-Card			Arduino A 1 / 051: COMP2_INM		9 A1			1												
PA 4	PA 4	PA 4	PA 4	PA 4					Arduino A 2 / DAC1_OUT		7 A2			1												
PA 5	PA 5	PA 5	PA 5	PA 5					Arduino A 3 / DAC2_OUT		5 A3			1												
PB 7	PB 9	PB 9	PB 7	PB 9			DCMI_D 7)	LCD_B7	Arduino A 4 / SDA		3 A4			1				1	27 PT8D SDA/PCLKI	0	1	125 PT20D SDA/PCLKC0	0			
PB 6	PB 6	PB 6	PB 6	PB 6	FMC_SDNE1	SDRAM/DCMI-D 5)---			Arduino A 5 / SCL		1 A5			1			1	28 PT8C SCL/PCLKI	0	1	126 PT20C SCL/PCLKT0	0				
PA10	PA10	PA10	PA10	PA10		DCMI-D 4)			TIM1_CH3 Arduino D 0 / USART1_RX		24 D0			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 D1			1	1								1	60 PB23B	2	
PA 7	PA 7	PD 2	PD 2	PD 2		DCMI_D11)			(TIM3_ETR)/TIM: Arduino D 2		28 D2			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 D3			1	1			1	23 PT9D DONE	0	1	109 PT28D DONE	0			
PA12	PA12	PA12	PA12	PA12				LCD_R5	(TIM1_ETR) Arduino D 4 / CAN1_TX / USART1_RTS / INITN		32 D4			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 D5		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 D6			1	1								1	56 PB20B PCLKC2_1	2	
PB 4	PB 8	PB 8	PB 8	PB 8					Arduino D 7		27 D7			1	1								1	52 PB15A	2	
PB 2	PB 7	PB 7		PG 6	FMC_INT2	NAND	DCMI_D12)	LCD_R7)	Arduino D 8 (For LQFP32, PB2 also used for SN)		25 D8			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 D9			1	1			1	20 PR5B PCLKC1_0	1	1	133 PT14A	0			
PA15	PA15	PA15	PA15	PA15		DCMI_HSYNC		LCD_VSYNC	TIM2_CH1 Arduino D10 SPI1_SS (PWM) / JTDI<-JTDO		21 D10			1				1	1 PT6C TDO	0	1	137 PT13C TDO	0			
PB 5	PB 5	PB 5	PB 5	PB 5	FMC_SDCKE1	SDRAM/DCMI-D10)---			TIM3_CH2 Arduino D11 / SPI1_MOSI (PWM) / CAN2_RX		19 D11			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 D12			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 / SPI1_SCK/ JTDO from STM32F4		15 D13		1	1				1	9 PB2C CCLK	2	1	44 PB9A CCLK	2			
		PF 4		PF 7	FMC_NREG	PG-Card			ELL-i E 0 LVDS 1T		33 E0				1	1		1	11 PB4A	2	1	141 PT10A	0			
		PF 5		PF 8	FMC_NIOWR	PG-Card			ELL-i E 1 LVDS 1C		35 E1				1	1		1	12 PB4B	2	1	140 PT10B	0			
		PF 6		PF 9	FMC_CD	PG-Card			ELL-i E 2 LVDS 2T		37 E2				1	1		1	13 PB4C	2	1	139 PT11A	0			
		PF 7		PF10	FMC_INTR	PG-Card/DCMI_D11)---	LCD_DE)		ELL-i E 3 LVDS 2C		39 E3				1	1		1	14 PB4D	2	1	138 PT11B	0			
		PC 0		XX					ELL-i E 4 LVDS 3T		41 E4				1							1	122 PT21A	0		
		PC 1		XX					ELL-i E 5 LVDS 3C		43 E5				1							1	121 PT21B	0		
		PC 2		XX					ELL-i E 6 LVDS 4T		45 E6				1							1	112 PT27A	0		
		PC 3		XX					ELL-i E 7 LVDS 4C		47 E7				1							1	111 PT27B	0		
		PC 4		PG 7	FMC_INT3	NAND	DCMI_D13)	LCD_CLK)	ELL-i E 8 LVDS 5T		49 E8				1							1	114 PT25A	0		
		PC 5		XX					ELL-i E 9 LVDS 5C		51 E9				1							1	113 PT25B	0		
-	-	PC 6	PC 6	PC 6		DCMI_D 0)		LCD_HSYNC	ELL-i E10 LVDS 6T		53 E10				1							1	143 PT9A	0		
-	-	PC 7	PC 7	PC 7		DCMI_D 1)		LCD_G6	ELL-i E11 LVDS 6C		55 E11				1							1	142 PT9B	0		
-	PB11	PB11	-	PB11				LCD_G5	ELL-i E12 I2C2 SDA		57 E12			1	1			1	4 PL5C	3	1	115 PT24B	0			
-	PB10	PB10	-	PB10				LCD_G4	ELL-i E13 I2C2 SCL		59 E13			1	1			1	5 PL5D	3	1	117 PT24A	0			
-	PB12	PB12	PB 9	PB12					ELL-i E14 SPI2 SS / CAN2_RX		60 E14				1							1	65 PB27A	2		
-	PB15	PB15	PB15	PB15					ELL-i E15 SPI2 MOSI		58 E15				1							1	69 PB29B	2		
-	PB14	PB14	PB14	PB14					ELL-i E16 SPI2 MISO		56 E16				1							1	68 PB29A	2		
-	PB13	PB13	PB10	PB13					ELL-i E17 SPI2 SCK / CAN2_TX		54 E17				1							1	67 PB27B	2		
-	-	PC11	PC11	PC11		DCMI-D 4			ELL-i E18 USART3_RX (F4-only)		52 E18				1							1	58 PB21B	2		
-	-	PC10	PC10	PC10		DCMI_D 8		LCD_R2	ELL-i E19 USART3_TX (F4-only)		50 E19				1							1	57 PB21A	2		
PA 1	PA 1	PA 1	-	-					ETH_ENC28J60 interrupt		ETH_INT															
-	-	-	PA 7	PA 7				LCD_R6)---	ETH_RMII_CRS_DV		ETH_CRS															
-	-	-	PC 1	PC 1					ETH_RMII_MDC		ETH_MDC															
-	-	-	PA 2	PA 2					ETH_RMII_MDIO		ETH_MDIO															
-	-	-	PA 1	PA 1					ETH_RMII_REF_CLK		ETH_CLK															
-	-	-	PC 4	PC 4					ETH_RMII_RXD0		ETH_RXD0															
-	-	-	PC 5	PC 5					ETH_RMII_RXD1		ETH_RXD1															
			PB12	PG13					ETH_RMII_TXD0		ETH_TXD0															
			PB13	PG14					ETH_RMII_TXD1		ETH_TXD1															
			PB11	PG11	FMC_NGE4_2	Chip-se DCMI-D 3)---	LCD_B3)---		ETH_RMII_TXEN		ETH_TXEN															
-	-	PC12	PC12	PC12		DCMI_D 9			Internal CSSPIN / DMCI_D9		CSSPIN							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		MCO							1	21 PR5A PCLKT1_0	1	1	128 PT18A PCLKT0_1	0			
-	-	PC 8	PC 8	PC 8		DCMI-D 2)			Internal PROGRAMN		PROGRAMN							1	25 PT9B PROGRAM	0	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)		FPGA_SN							1	16 PB9A SN	2	1	70 PB30A SN	2			
PA14	PA14	PA14	PA14	PA14					JTAG JTCK / SWCLK		JTCK		1					1	30 PT7A TCK	0	1	131 PT15C TCK	0			
-	-	PC 9	PC 9	PC 9					JTAG JTDI to MachXO2		JTDI							1	32 PT6D TDI	0	1	136 PT13D TDI	0			
PA13	PA13	PA13	PA13	PA13					JTAG JTMS / SWDIO		JTMS							1	29 PT7B TMS	0	1	130 PT15D TMS	0			
PB 4	PB 4	PB 4	PB 4	PB 4					JTAG NJTRST/JTAGENB		JTRST		1					1	26 PT9A JTAGENB	0	1	120 PT23C JTAGENB	0			
			PD14	PD14	FMC_D 0				MEM ADDR / DATA 0		MEM_D0						1					1	1 PL3A	5		
			PD15	PD15	FMC_D 1				MEM ADDR / DATA 1		MEM_D1						1					1	2 PL3B	5		
			PD 0	PD 0	FMC_D 2				MEM ADDR / DATA 2		MEM_D2						1					1	3 PL4A	5		
			PD 1	PD 1	FMC_D 3				MEM ADDR / DATA 3		MEM_D3						1					1	4 PL4B	5		
			PE 7	PE 7	FMC_D 4				MEM ADDR / DATA 4		MEM_D4						1					1	5 PL6A	5		
			PE 8	PE 8	FMC_D 5				MEM ADDR / DATA 5		MEM_D5						1					1	6 PL6B	5		
			PE 9	PE 9	FMC_D 6				MEM ADDR / DATA 6		MEM_D6						1					1	9 PL7A	5		
			PE10	PE10	FMC_D 7				MEM ADDR / DATA 7		MEM_D7						1					1	10 PL7B	5		
			PE11	PE11	FMC_D 8			LCD_G3	MEM ADDR / DATA 8		MEM_D8						1					1	11 PL8A	5		
			PE12	PE12	FMC_D 9			LCD_B4	MEM ADDR / DATA 9		MEM_D9						1					1	12 PL8B	5		
			PE13	PE13	FMC_D10			LCD_DE)	MEM ADDR / DATA10		MEM_D10						1					1	20 PL10D PCLKC4_0	4		
			PE14	PE14	FMC_D11			LCD_CLK)	MEM ADDR / DATA11		MEM_D11						1					1	19 PL10C PCLKT4_0	4		
			PE15	PE15	FMC_D12			LCD_R7)++	MEM ADDR / DATA12		MEM_D12						1					1	15 PL10A	4		
			PD 8	PD 8	FMC_D13				MEM ADDR / DATA13		MEM_D13						1					1	17 PL10B	4		
			PD 9	PD 9	FMC_D14				MEM ADDR / DATA14		MEM_D14						1					1	13 PL9A	4		
			PD10	PD10	FMC_D15			LCD_B3)	MEM ADDR / DATA15		MEM_D15						1					1	14 PL9B	4		
			PF 0	FMC_A 0					MEM ADDR 0		MEM_A0	</														