

TODO: FPGA clocks and PLLs.

						USED		6		20		16		59		38		22		0		115		0				
						FREE																						
F0-32 PIN	F0-48 PIN	P0-64 PIN	F4-100 PIN	F14-144 PIN	Nucleo	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	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	PA 0					Arduino A 0		11 A0				1												
PA 2	PA 2	PA 2	PF 6	PA 1		FMC_NIORD	PC-Card			Arduino A 1 / 051: COMP2_INM		9 A1				1												
PA 4	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	PB 0					Arduino A 3 / DAC2_OUT		5 A3				1												
PB 7	PB 9	PB 9	PB 7	PB 9	PC 0			DCMI_D 7)	LCD_B7	Arduino A 4 / SDA		3 A4				1				1	27 PT8D SDA/PCLK0	0	1	125 PT20D SDA/PCLKC0	0			
PB 6	PB 6	PB 6	PB 6	PB 6	PC 1			SDRAM(DCMID-5)~		Arduino A 5 / SCL		1 A5								1	28 PT8C SCL/PCLK1	0	1	126 PT20C SCL/PCLKT0	0			
PA10	PA10	PA10	PA10	PA10	PA 3			DCMI-D-1)		Arduino D 0 / USART1 RX	TIM1_CH3	24 D0				1	1							1	59 PB23A	2		
PA 9	PA 9	PA 9	PA 9	PA 9	PA 2			DCMI-D-9)		Arduino D 1 / USART1 TX	TIM1_CH2	26 D1				1	1							1	60 PB23B	2		
PA 7	PA 7	PD 2	PD 2	PD 2	PA10			DCMI-D11)		(TIM3_ETR)/TIM Arduino D 2	(TIM3_ETR)/TIM	28 D2				1	1							1	127 PT18B PCLKC0_1	0		
PA11	PA11	PA11	PA11	PA11	PB 3				LCD_R4	Arduino D 3 (PWM) / CAN1_RX / USART1_CTS / DONE	TIM1_CH4	30 D3				1	1							1	52 PB15A	2		
PA12	PA12	PA12	PA12	PA12	PB 5				LCD_R5	Arduino D 4 / CAN1_TX / USART1_RTS / INITN	(TIM1_ETR)	32 D4				1	1							1	54 PB15B	2		
PB 1	PB 1	PB 1	PB 1	PB 1	PB 5				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	PB10				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	PA 8					Arduino D 7		27 D7				1	1			1	23 PT9D DONE	0	1	109 PT28D DONE	0			
PB 0	PB 7	PB 7	PG 6	PA 9		FMC_INT2	NAND	DCMI_D12)	LCD_R7)	Arduino D 8 (For LQFP32, PB2 also used for SN)		25 D8				1	1			--	--	--		1	110 PT28C INITN	0		
PB 2	PB 0	PB 0	PB 0	PB 0	PC 7				LCD_R3	Arduino D 9 (PWM)	TIM3_CH3	23 D9				1	1			1	20 PR5B PCLKC1_0	1	1	133 PT14A	0			
PA15	PA15	PA15	PA15	PA15	PB 6			DCMI_HSYNC	LCD_VSYNC	TIM2_CH1	Arduino D10 SPI1_SS (PWM) / JTDI<~JTD0	21 D10				1				1	1 PT6C TDO	0	1	137 PT13C TDO	0			
PB 5	PB 5	PB 5	PB 5	PB 5	PA 7			SDRAM(DCMID-10)~		Arduino D11 / SPI1_MOSI (PWM) / CAN2_RX	TIM3_CH2	19 D11								1	17 PB9B SI	2	1	71 PB30B SI	2			
PA 6	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	PA 5					Arduino D13 / SPI1_SCK/ JTD0 from STM32F4	TIM2_CH2	15 D13			1	1				1	9 PB2C CCLK	2	1	44 PB9A CCLK	2			
		PF 4	PF 7			FMC_NREG	PC-Card			ELL-i E 0 LVDS 1T		33 E0					1	1		1	11 PB4A	2	1	141 PT10A	2			
		PF 5	PF 8			FMC_NIOWR	PC-Card			ELL-i E 1 LVDS 1C		35 E1				1	1			1	12 PB4B	2	1	140 PT10B	2			
		PF 6	PF 9			FMC_CD	PC-Card			ELL-i E 2 LVDS 2T		37 E2				1	1			1	13 PB4C	2	1	139 PT11A	0			
		PF 7	PF10			FMC_INTR	PC-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					DCMI_D 0)	LCD_HSYNC	ELL-i E10 LVDS 6T		53 E10				1									1	143 PT9A	0	
-	-	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	-	-					LCD_R6)~	ETH ENC28J60 interrupt		ETH_INT																
-	-	-	PA 7	PA 7						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						ETH_RMII_TXEN		ETH_TXEN																
-	-	PC12	PC12	PC12				FMC_NGE4_2	Chip-se	DCMI-D-3)~	LCD-B3)~	Internal	CSSPIN / DMCI_D9							1	8 PB2A CSSPIN	2	1	40 PB4A CSSPIN	2			
PA 8	PA 8	PA 8	PA 8	PA 8				DCMI_D 9	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-2)			Internal	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					1	32 PT6D TDI	0	1	136 PT13D TDI	0		
PA13	PA13	PA13	PA13	PA13						JTAG JTMS / SWDIO		JTMS				1					1	29 PT7B TMS	0	1	130 PT15D TMS	0		
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									