Pin	Frei	Discovery-Board											CPU																	
Pin	Frei	LED/BTN	LIS302	CS43L22	MP45DT02	USB	SWD	Pin	ADC1	ADC2	ADC3	DAC	Pin	SPI1	SPI2	SPI3	Pin	I2C1	I2C2	I2C3	Pin	UART1	UART2	UART3	UART4	UART5	UART6	Pin	SDIO	Pin
PA0		Button						PA0	ADC1-IN0	ADC2-IN0	ADC3-IN0		PA0				PA0				PA0				UART4-TX			PA0		PA0
PA1	Frei							PA1	ADC1-IN1	ADC2-IN1	ADC3-IN1		PA1				PA1				PA1				UART4-RX			PA1		PA1
PA2	Frei							PA2	ADC1-IN2	ADC2-IN2	ADC3-IN2		PA2				PA2				PA2		UART2-TX					PA2		PA2
PA3	Frei							PA3	ADC1-IN3	ADC2-IN3	ADC3-IN3		PA3				PA3				PA3		UART2-RX					PA3		PA3
PA4				I2S3-WS				PA4	ADC1-IN4	ADC2-IN4		DAC1	PA4				PA4				PA4							PA4		PA4
PA5			SPI1-CLK					PA5	ADC1-IN5	ADC2-IN5		DAC2	PA5	SPI1-SCK			PA5				PA5							PA5		PA5
PA6			SPI1-MISO					PA6	ADC1-IN6	ADC2-IN6			PA6	SPI-MISO			PA6				PA6							PA6		PA6
PA7			SPI1-MOSI					PA7	ADC1-IN7	ADC2-IN7			PA7	SPI1-MOSI			PA7				PA7							PA7		PA7
PA8	Frei							PA8					PA8				PA8			I2C3-SCL	PA8							PA8		PA8
PA9						LED/VBUS		PA9					PA9				PA9				PA9	UART1-TX						PA9		PA9
PA10						ID		PA10					PA10				PA10				PA10	UART1-RX						PA10		PA10
PA11						DM		PA11					PA11				PA11				PA11							PA11		PA11
PA12						DP		PA12					PA12				PA12				PA12							PA12		PA12
PA13							SWDIO	PA13					PA13				PA13				PA13							PA13		PA13
PA14							SWCLK	PA14					PA14				PA14				PA14							PA14		PA14
PA15	Frei							PA15					PA15				PA15				PA15							PA15		PA15
Pin								Pin					Pin				Pin				Pin							Pin		Pin
PB0	Frei							PB0	ADC1-IN8	ADC2-IN8			PB0				PB0				PB0							PB0		PB0
PB1	Frei							PB1	ADC1-IN9	ADC2-IN9			PB1				PB1				PB1							PB1		PB1
PB2	Frei							PB2					PB2				PB2				PB2							PB2		PB2
PB3							SWO	PB3					PB3	SPI1-SCK		SPI3-SCK	PB3				PB3							PB3		PB3
PB4	Frei							PB4					PB4	SPI1_MISO		SPI3-MISO	PB4				PB4							PB4		PB4
PB5	Frei							PB5					PB5	SPI1-MOSI		SPI3-MOSI	PB5				PB5							PB5		PB5
PB6				I2C1-SCL				PB6					PB6				PB6	I2C1-SCL			PB6	UART1-TX						PB6		PB6
PB7	Frei							PB7					PB7				PB7	I2C1-SDA			PB7	UART1-RX						PB7		PB7
PB8	Frei							PB8					PB8				PB8	I2C1-SCL			PB8							PB8	SDIO_D4	PB8
PB9				I2C1-SDA				PB9					PB9				PB9	I2C1-SDA			PB9							PB9	SDIO_D5	PB9
PB10						CLK		PB10					PB10		SPI2-SCK		PB10		I2C2-SCL		PB10			UART3-TX				PB10		PB10
PB11	Frei							PB11					PB11				PB11		I2C2-SDA		PB11			UART3-RX				PB11		PB11
PB12	Frei							PB12					PB12				PB12				PB12							PB12		PB12
PB13	Frei							PB13					PB13		SPI2-SCK		PB13				PB13							PB13		PB13
PB14	Frei							PB14					PB14		SPI2-MISO		PB14				PB14							PB14		PB14
PB15	Frei							PB15					PB15		SPI2-MOSI		PB15				PB15							PB15		PB15
Pin								Pin					Pin				Pin				Pin							Pin		Pin
PC0						PowerOn		PC0	ADC1-IN10	ADC2-IN10	ADC3-IN10		PC0				PC0				PC0							PC0		PC0
PC1	Frei							PC1	ADC1-IN11	ADC2-IN11	ADC3-IN11		PC1				PC1				PC1							PC1		PC1
PC2	Frei							PC2	ADC1-IN12	ADC2-IN12	ADC3-IN12		PC2		SPI2-MISO		PC2				PC2							PC2		PC2
PC3					DOUT			PC3	ADC1-IN13	ADC2-IN13	ADC3-IN13		PC3		SPI2-MOSI		PC3				PC3							PC3		PC3
PC4	Frei							PC4	ADC1-IN14	ADC2-IN14			PC4				PC4				PC4							PC4		PC4
PC5	Frei							PC5	ADC1-IN15	ADC2-IN15			PC5				PC5				PC5							PC5		PC5
PC6	Frei							PC6					PC6				PC6				PC6						UART6-TX	PC6	SDIO_D6	PC6
PC7				I2S3-MCK				PC7					PC7				PC7				PC7						UART6-RX	PC7	SDIO_D7	PC7
PC8	Frei							PC8					PC8				PC8				PC8							PC8	SDIO_D0	PC8
PC9	Frei							PC9					PC9				PC9			I2C3-SDA	PC9							PC9	SDIO_D1	PC9
PC10				I2S3-SCK				PC10					PC10			SPI3-SCK	PC10				PC10			UART3-TX	UART4-TX			PC10	SDIO_D2	PC10
PC11	Frei							PC11					PC11			SPI3-MISO	PC11				PC11			UART3-RX	UART4-RX			PC11	SDIO_D3	PC11
PC12				I2S3-SD				PC12					PC12			SPI3-MOSI	PC12				PC12					UART5-TX		PC12	SDIO_CK	PC12
PC13	Frei							PC13					PC13				PC13				PC13							PC13		PC13
PC14	Frei							PC14					PC14				PC14				PC14							PC14		PC14
PC15	Frei							PC15					PC15				PC15				PC15							PC15		PC15
Pin								Pin					Pin				Pin				Pin							Pin		Pin
PD0	Frei							PD0					PD0				PD0				PD0							PD0		PD0
PD1	Frei							PD1					PD1				PD1				PD1							PD1		PD1
PD2	Frei							PD2					PD2				PD2				PD2					UART5-RX		PD2	SDIO_CMD	PD2
PD3	Frei							PD3					PD3				PD3				PD3							PD3		PD3
PD4				Reset				PD4					PD4				PD4				PD4							PD4		PD4
PD5						LED/OvCurr.		PD5					PD5				PD5				PD5		UART2-TX					PD5		PD5
PD6	Frei							PD6					PD6				PD6				PD6		UART2-RX					PD6		PD6
PD7	Frei							PD7					PD7				PD7				PD7							PD7		PD7
PD8	Frei							PD8					PD8				PD8				PD8			UART3-TX				PD8		PD8
PD9	Frei							PD9					PD9				PD9				PD9			UART3-RX				PD9		PD9
PD10	Frei							PD10					PD10				PD10				PD10							PD10		PD10
PD11	Frei							PD11					PD11				PD11				PD11							PD11		PD11

Pin							Pin				Pin				Pin				Pin							Pin		Pin	
PD12	LED green						PD12				PD12				PD12				PD12							PD12		PD12	
PD13	LED orange						PD13				PD13				PD13				PD13							PD13		PD13	
PD14	LED red						PD14				PD14				PD14				PD14							PD14		PD14	
PD15	LED blue						PD15				PD15				PD15				PD15							PD15		PD15	
Pin							**Pin**				**Pin**				**Pin**				**Pin**							**Pin**		**Pin**	
PE0		INT1					PE0				PE0				PE0				PE0							PE0		PE0	
PE1		INT2					PE1				PE1				PE1				PE1							PE1		PE1	
PE2	Frei						PE2				PE2				PE2				PE2							PE2		PE2	
PE3		ChipSel					PE3				PE3				PE3				PE3							PE3		PE3	F
PE4	Frei						PE4				PE4				PE4				PE4							PE4		PE4	
PE5	Frei						PE5				PE5				PE5				PE5							PE5		PE5	
PE6	Frei						PE6				PE6				PE6				PE6							PE6		PE6	
PE7	Frei						PE7				PE7				PE7				PE7							PE7		PE7	
PE8	Frei						PE8				PE8				PE8				PE8							PE8		PE8	
PE9	Frei						PE9				PE9				PE9				PE9							PE9		PE9	
PE10	Frei						PE10				PE10				PE10				PE10							PE10		PE10	
PE11	Frei						PE11				PE11				PE11				PE11							PE11		PE11	
PE12	Frei						PE12				PE12				PE12				PE12							PE12		PE12	
PE13	Frei						PE13				PE13				PE13				PE13							PE13		PE13	F
PE14	Frei						PE14				PE14				PE14				PE14							PE14		PE14	F
PE15	Frei						PE15				PE15				PE15				PE15							PE15		PE15	F