X1-1 GND Signal ground X1-2 GND Signal ground X1-3 PB5 Input Rotary encoder signal A X1-4 PB7 Input Joystick button X1-5 PB4 Input DCF77 module data input X1-6 PB6 Input Rotary encoder button X1-7 PB3 MISO SPI Master Input/Slave Output (+ISP output) X1-8 PB0 SS SPI Slave Select (toggle ADXL - extern Stance) X1-9 PB2 MOSI SPI Master Output/Slave Input (+ISP input) X1-10 CLKI External microcontroller clock in signal X1-11 PB1 SCK SPI Serial Clock X1-12 PD5 Output Display RW signal X1-13 PD7 Output Display Exignal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (IPC) Serial Data X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA	Board Pin	μC Port	Signal	Function
X1-3 PB5 Input Rotary encoder signal A X1-4 PB7 Input Joystick button X1-5 PB4 Input DCF77 module data input X1-6 PB6 Input Rotary encoder button X1-7 PB3 MISO SPI Master Input/Slave Output (+ISP output) X1-8 PB0 SS SPI Slave Select (toggle ADXL - extern Size of Spice of Spice output) X1-9 PB2 MOSI SPI Master Output/Slave Input (+ISP input) X1-10 CLKI External microcontroller clock in signal X1-11 PB1 SCK SPI Serial Clock X1-12 PD5 Output Display Exignal X1-13 PD7 Output Display Exignal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (IPC) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (IPC) Serial Clock X1-18 PG2 Input Rotary encoder signal B				Signal ground
X1-3 PB5 Input Rotary encoder signal A X1-4 PB7 Input Joystick button X1-5 PB4 Input DCF77 module data input X1-6 PB6 Input Rotary encoder button X1-7 PB3 MISO SPI Master Input/Slave Output (+ISP output/Slave Input (+ISP output/Slave Input (+ISP input/Slave Input/Slave Input (+ISP input/Slave Input/Slav	X1-2		GND	Signal ground
X1-5 PB4 Input DCF77 module data input X1-6 PB6 Input Rotary encoder button X1-7 PB3 MISO SPI Master Input/Slave Output (+ISP output) X1-8 PB0 SS SPI Slave Select (toggle ADXL - extern SPI Master Output/Slave Input (+ISP input) X1-9 PB2 MOSI SPI Master Output/Slave Input (+ISP input) X1-10 CLKI External microcontroller clock in signal X1-11 PB1 SCK SPI Serial Clock X1-12 PD5 Output Display RW signal X1-13 PD7 Output Display E signal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I²C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA1 signal X2-9 PD4 Output Display DATA2 signal X2-9 PD4 Output Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-9 PD4 Output/Input Display DATA4 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-13 PF1 ADC1 Microphone differential input (-) Display DATA5 signal	X1-3	PB5	Input	
X1-6 PB6 Input Rotary encoder button X1-7 PB3 MISO SPI Master Input/Slave Output (+ISP output/Slave PB0 SS SPI Slave Select (toggle ADXL - extern SPI Master Input/Slave Input (+ISP input/Slave PB0 SS SPI Slave Select (toggle ADXL - extern SPI Master Output/Slave Input (+ISP input/Slave Input/S	X1-4	PB7	Input	Joystick button
X1-7 PB3 MISO SPI Master Input/Slave Output (+ISP output/Slave SS SPI Slave Select (toggle ADXL - extern SPI Slave Select Select	X1-5	PB4	Input	DCF77 module data input
X1-8 PB0 SS SPI Slave Select (toggle ADXL - extern S X1-9 PB2 MOSI SPI Master Output/Slave Input (+ISP input X1-10 CLKI External microcontroller clock in signal X1-11 PB1 SCK SPI Serial Clock X1-12 PD5 Output Display RW signal X1-13 PD7 Output Display E signal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I*C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I*C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA1 signal X2-7 PE2 Output/Input Display DATA2 signal X2-9 PD4 Output Display DATA3 signal X2-1 PF0 ADC0 Microphone differential input (-) X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-14 PE6 Output/Input Display DATA5 signal X2-15 PE1 Output/Input Display DATA5 signal X2-16 PE6 Output/Input Display DATA5 signal X2-17 PE2 Output/Input Display DATA5 signal X2-19 PE4 Output/Input Display DATA5 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-14 PE6 Output/Input Display DATA6 signal	X1-6	PB6	Input	Rotary encoder button
X1-8 PB0 SS SPI Slave Select (toggle ADXL - extern S X1-9 PB2 MOSI SPI Master Output/Slave Input (+ISP input X1-10 CLKI External microcontroller clock in signal X1-11 PB1 SCK SPI Serial Clock X1-12 PD5 Output Display RW signal X1-13 PD7 Output Display E signal NX1-13 PD7 Output Display E signal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I°C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I°C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X2-1 +3.3V Battery or external supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA1 signal X2-8 PE3 Output/Input Display DATA2 signal X2-9 PD4 Output Display DATA3 signal X2-9 PD4 Output/Input Display DATA3 signal X2-9 PD4 Output/Input Display DATA3 signal X2-1 PF0 ADC0 Microphone differential input (-) X2-14 PE6 Output/Input Display DATA5 signal X2-11 PF0 ADC0 Microphone differential input (-) Display DATA5 signal X2-1 PE5 Output/Input Display DATA5 signal X2-1 PE6 Output/Input Display DATA5 signal X2-14 PE6 Output/Input Display DATA5 signal	X1-7	PB3	MISO	SPI Master Input/Slave Output (+ISP output)
X1-9 PB2 MOSI SPI Master Output/Slave Input (+ISP input X1-10 CLKI External microcontroller clock in signal X1-11 PB1 SCK SPI Serial Clock X1-12 PD5 Output Display RW signal X1-13 PD7 Output Display RW signal X1-14 PD3 TXD1 USART 1 Transmit X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I*C) Serial Data Buzzer / Speaker X1-17 PD0 SCL TWI (I*C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X2-1 +3.3V Battery or external supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA4 signal X2-1 PF0 ADC0 Microphone differential input (-) X2-14 PE6 Output/Input Display DATA5 signal X2-11 PF0 ADC0 Microphone differential input (-) Display DATA5 signal X2-11 PF0 ADC1 Microphone differential input (-) Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (-) Display DATA5 signal	X1-8	PB0	SS	
X1-10	-	-		` 55
X1-11 PB1 SCK SPI Serial Clock X1-12 PD5 Output Display RW signal X1-13 PD7 Output Display E signal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I²C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA4 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA5 signal				
X1-13 PD7 Output Display E signal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I²C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA2 signal X2-8 PE3 Output/Input Display DATA2 signal X2-9 PD4 Output Display CS signal X2-1 PF2 Output/Input Display DATA4 signal X2-1 PF5 Output/Input Display DATA4 signal X2-1 DE5 Output/Input Display DATA4 signal X2-1 DE4 Output/Input Display DATA4 signal X2-1 DISPLAY DATA4 signal X2-1 DE5 Output/Input Display DATA4 signal X2-1 DISPLAY DATA4 signal X2-1 DE5 Output/Input Display DATA4 signal X2-1 DE5 Output/Input Display DATA5 signal X2-1 DISPLAY DATA5 signal		PB1	SCK	<u> </u>
X1-13 PD7 Output Display E signal X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I²C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA2 signal X2-8 PE3 Output/Input Display DATA2 signal X2-9 PD4 Output Display CS signal X2-1 PE4 Output/Input Display DATA4 signal X2-1 PE5 Output/Input Display DATA4 signal X2-1 DISPLAY DATA5 signal X2-10 PE4 Output/Input DISPLAY DATA5 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-14 PE6 Output/Input DISPLAY DATA6 signal	X1-12	PD5	Output	Display RW signal
X1-14 PD3 TXD1 USART 1 Transmit X1-15 PD1 SDA TWI (I²C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output X2-7 PE2 Output/Input Display DATA2 signal X2-9 PD4 Output X2-10 PE4 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA5 signal		-	· ·	. , ,
X1-15 PD1 SDA TWI (I²C) Serial Data X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA2 signal X2-7 PE2 Output/Input Display DATA3 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA4 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA5 signal				. , ,
X1-16 PG5 PWM Output B Timer 0 Buzzer / Speaker X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (Iow active) X1-20 PG1 Output Red LED (Iow active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA2 signal X2-7 PE2 Output/Input Display DATA3 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA5 signal				
X1-17 PD0 SCL TWI (I²C) Serial Clock X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-9 PD4 Output Display DATA3 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0				
X1-18 PG2 Input Rotary encoder signal B X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X2-1 +3.3V Battery or external supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display DATA2 signal X2-7 PE2 Output/Input Display DATA3 signal X2-8 PE3 Output/Input Display DATA4 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5<	-		· ·	•
X1-19 RSTN Reset (low active) X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-9 PD4 Output Display DATA4 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Inp				
X1-20 PG1 Output Red LED (low active) X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-9 PD4 Output Display DATA4 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+)			· ·	, ,
X1-21 AREF Analog reference input X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display AO signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal		PG1	-	,
X1-22 GND Signal ground X1-23 +3.3V Battery or external supply X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-9 PD4 Output Display DATA4 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal	-	101		,
X1-23	— .			
X1-24 +5.0V DCDC converter supply X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				
X2-1 +3.3V Battery or external supply X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-10 PE4 Output/Input Display CS signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				, , , , , , , , , , , , , , , , , , , ,
X2-2 GND Signal ground X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-10 PE4 Output/Input Display CS signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal			7 7	
X2-3 PE0 Output/Input Display DATA0 signal X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display DATA3 signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				11.3
X2-4 PD2 RXD1 USART 1 Receive X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal		PF0		0 0
X2-5 PE0 Output/Input Display DATA1 signal X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal		- 1		-
X2-6 PD6 Output Display A0 signal + ext. EEPROM power X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				
X2-7 PE2 Output/Input Display DATA2 signal X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				, ,
X2-8 PE3 Output/Input Display DATA3 signal X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal			l ·	. ,
X2-9 PD4 Output Display CS signal X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				. ,
X2-10 PE4 Output/Input Display DATA4 signal X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				
X2-11 PF0 ADC0 Microphone differential input (-) X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal			•	, , ,
X2-12 PE5 Output/Input Display DATA5 signal X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal	-			
X2-13 PF1 ADC1 Microphone differential input (+) X2-14 PE6 Output/Input Display DATA6 signal				1 1
X2-14 PE6 Output/Input Display DATA6 signal				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				,
X2-15 PF4 ADC4 External light sensor				, ,
X2-16 PE7 Output/Input Display DATA7 signal				
X2-17 PF5 ADC5 Analog joystick input			the state of the s	
X2-18 PF2 ADC2 External temperature sensor				0,,
X2-19 PF6 Output Green LED (low active)			-	· ·
X2-20 RSTON Reset out (low = internal reset active)			· ·	,
X2-21 PF7 Output Yellow LED (low active)		PF7		
X2-22 GND Signal ground				,
X2-23 GND Signal ground			-	0 0
X2-24 +5.0V DCDC converter supply				0 0

Pin	SPI
1	Slave Select
2	MISO
3	MOSI
4	Serial Clock
5	GND
6	+3.3V supply (out)

Pin		I ² C
	1	SDA
	2	SCL
	3	GND
	4	+3.3V supply (out)

Pin	UART
1	GND
2	-
	5.0V supply (in)
4	RXD
5	TXD
6	-

Pin	ISP
1	Programming output
2	Supply voltage sense
3	Programming clock
4	Programming input
5	Reset
6	GND

Pin	DCF77
1	+3.3V supply (out)
2	GND
3	Data
4	Power On (low active)