| | Α | В | С | D | E | F | G | Н |
|----|---|-------------|------------|------------|--------------------------|-----------------------------|-----------------|----------------|
| | | | | | | | | |
| 1 | | NetName | F149 Port | Property | Application | Action | MSP430F149 Port | MSP430F149 Pin |
| 2 | | p1.0 | p1.0 | uP I/O out | | | p1.0 | p12 |
| 3 | | ZAP_Sw | p1.1 | uP I/O in | PushButton | Manually Triggers Zap | p1.1 | p13 |
| 4 | | BZZR | p1.2 | uP I/O out | Amplified Buzzer | PWM | p1.2 | p14 |
| 5 | | INC_Sw | p1.3 | uP I/O in | PushButton | Increment | p1.3 | p15 |
| 6 | | DEC_Sw | p1.4 | uP I/O in | PushButton | Decrement | p1.4 | p16 |
| 7 | | ZAP | p1.5 | uP I/O out | LED monitor | Current Out monitor | p1.5 | p17 |
| 8 | | BRLY | p1.6 | uP I/O out | Human/ Model | Relay Commute | p1.6 | p18 |
| 9 | | notEF | p1.7 | uP I/O out | Error Flag | XTR Control error | p1.7 | p19 |
| 10 | | IA | p2.0 | uP I/O out | 7Segment LED | BCD data | p2.0 | p20 |
| 11 | | IB | p2.1 | uP I/O out | 7Segment LED | BCD data | p2.1 | p21 |
| 12 | | IC | p2.2 | uP I/O out | 7Segment LED | BCD data | p2.2 | p22 |
| 13 | | ID | p2.3 | uP I/O out | 7Segment LED | BCD data | p2.3 | p23 |
| 14 | | LEH | p2.4 | uP I/O out | 7Segment LED | HiDigit enable | p2.4 | p24 |
| 15 | | LEL | p2.5 | uP I/O out | 7Segment LED | LoDigit enable | p2.5 | p25 |
| 16 | | BLED | p2.6 | uP I/O out | Board LED | Board Active | p2.6 | p26 |
| 17 | | p2.7 | p2.7 | uP I/O in | | | p2.7 | p27 |
| 18 | | &SYNC | p3.0 | uP I/O out | DAC | SPI sync | p3.0 | p28 |
| 19 | | DIN | p3.1 | uP I/O out | DAC | DAC Data -SPI | p3.1 | p29 |
| 20 | | p3.2 | p3.2 | uP I/O out | | | p3.2 | p30 |
| 21 | | SCLK | p3.3 | uP I/O out | DAC | SPI clk | p3.3 | p31 |
| 22 | | TXUC | p3.4 | uP I/O out | RS232 TX D0 | | p3.4 | p32 |
| 23 | | RXUC | p3.5 | uP I/O out | RS232 RX D0 | | p3.5 | p33 |
| 24 | | p3.6 | p3.6 | uP I/O out | | | p3.6 | p34 |
| 25 | | p3.7 | p3.7 | uP I/O in | | | p3.7 | p35 |
| 26 | | p4.0 | p4.0 | uP I/O in | Buffered | | p4.0 | p27 |
| 27 | | BEAT | p4.1 | uP I/O out | Heart Beat LED | PWM | p4.1 | p37 |
| 28 | | D4 | p4.2 | uP I/O out | LCD | LCD Data | p4.2 | p38 |
| 29 | | D5 | p4.3 | uP I/O out | LCD | LCD Data | p4.3 | p39 |
| 30 | | D6 | p4.4 | uP I/O out | LCD | LCD Data | p4.4 | p40 |
| 31 | | D7 | p4.5 | uP I/O out | LCD | LCD Data | p4.5 | p41 |
| 32 | | ELCD | p4.6 | uP I/O out | LCD | Enable signal | p4.6 | p42 |
| 33 | | RS | p4.7 | uP I/O out | LCD | Reset Signal | p4.7 | p43 |
| 34 | | p5.0 | p5.0 | uP I/O out | Buffered | | p5.0 | p44 |
| 35 | | SDA | p5.1 | uP I/O out | i2c | SDA | p5.1 | p45 |
| 36 | | OPTO_IN | p5.2 | uP I/O out | External Trigger | Optoisolated trigger signal | p5.2 | p46 |
| 37 | | SCL | p5.3 | uP I/O out | i2c | SCL | p5.3 | p47 |
| 38 | | p5.4 | p5.4 | uP I/O out | | | p5.4 | p48 |
| 39 | | OD | p5.5 | uP I/O out | OutPut Disable | XTR off | p5.5 | p49 |
| 40 | | p5.6 | p5.6 | uP I/O out | | | p5.6 | p50 |
| 41 | | p5.7 | p5.7 | uP I/O out | Buffered | | p5.7 | p51 |
| 42 | | CUSA | p6.0 | uP A/D in | | PID Loop Sample | p6.0 | p59 |
| 43 | | AMPL | p6.1 | uP A/D in | Amplitude Set | Pot read | p6.1 | p60 |
| 44 | | DCOS | p6.2 | uP A/D in | DC Offset Set | Pot read | p6.2 | p61 |
| 45 | | FREQ | p6.3 | uP A/D in | Frequency Set | Pot read | p6.3 | p2 |
| 46 | | BATT_SAMPLE | p6.4 | uP A/D in | Read Battery | Battery Monitor | p6.4 | p3 |
| 47 | | Vo_Sample | p6.5 | uP A/D in | Impedance Monitor | Sample Subject Voltage | p6.5 | p4 |
| 48 | | p6.6 | p6.6 | uP A/D in | | DAC0 | p6.6 | p5 |
| 49 | | AnaSyn | p6.7 | uP A/D in | Analog Signal Generation | DAC1 | p6.7 | p6 |
| 50 | | +3V3 | Avec, DVcc | | uP Power | | | 64, 1 |
| 51 | | AGND | Avss, DVss | | Ground | | Avss, DVss | 62, 63 |