**Edge connector pin assignments for D&C board**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Connector** | **Pin** | **Connection** | **Additional Information** | **Used For** |
| J4 | 1 | VCC |  |  |
|  | 2 |  |  |  |
|  | 3 | I2C3\_SCL |  |  |
|  | 4 | I2C3 SDA |  |  |
|  | 5 |  |  |  |
|  | 6 | DAC1 OUT | (PA4) | Noise, Arbitrary |
|  | 7 | DAC2\_OUT | (PA5) | Triangular |
|  | 8 | GND |  |  |
| J5 | 1 | VCC |  |  |
|  | 2 |  |  |  |
|  | 3 | EXT PB4 |  |  |
|  | 4 | EXT\_PB5 |  |  |
|  | 5 | EXT PB7 |  | Freq Meter input |
|  | 6 | EXT\_PB8 |  | FSK input |
|  | 7 | EXT PB15 |  |  |
|  | 8 | GND |  |  |
| J6 | 1 | VCC |  |  |
|  | 2 |  |  |  |
|  | 3 | EXT\_PC4 | ADC12\_IN14 |  |
|  | 4 | EXT PC5 | ADC12 IN15 |  |
|  | 5 | EXT\_PC6 |  |  |
|  | 6 | EXT\_PC13 |  |  |
|  | 7 |  |  |  |
|  | 8 | GND |  |  |
| J7 | 1 | VCC |  | DDS - VCC |
|  | 2 | EXT\_PE3 |  | DDS |
|  | 3 | EXT PE4 |  | DDS |
|  | 4 | EXT PE5 |  | DDS |
|  | 5 | EXT\_PE6 |  |  |
|  | 6 | EXT PE7 |  |  |
|  | 7 |  |  |  |
|  | 8 | GND |  | DDS - GND |

|  |  |
| --- | --- |
| **DDS Pin** | **Board Edge Pin** |
| 1 (VCC) | J7-1 (VCC) |
| 9 (D7) | NOT REQUIRED!! |
| 10 (GND) | J7-8 (GND) |
| 12 (Sine Out1) | J5-5 (Freq Met) |
| 14 (Square Out1) | J5-5 (Freq Met) |
| 15 (GND) | J7-8 (GND) |
| 16 (RST) | NOT REQUIRED!! |
| 17 (DATA) | J7-2 (E3) |
| 18 (FQ\_UD) | J7-4 (E5) |
| 19 (W\_CLK) | J7-3 (E4) |
| 20 (VCC) | J7-1 (VCC) |

**DDS in Serial Mode**

**Timers**

|  |  |  |
| --- | --- | --- |
| **Timer** | **Usage** | **Comments** |
| Timer 1 |  | Advanced |
| Timer 2 | FSK |  |
| Timer 3 | Pulse generator |  |
| Timer 4 | Frequency meter |  |
| Timer 5 | DAC - Noise |  |
| Timer 6 | DAC - Arbitory |  |
| Timer 7 |  |  |
| Timer 8 |  | Advanced |
| Timer 9 |  | No IRQ!! |
| Timer 10 |  | No IRQ!! |
| Timer 11 |  | No IRQ!! |
| Timer 12 |  | No IRQ!! |
|  |  |  |