

| Mesa |      |        |             |  | G540 |                       |             |        |
|------|------|--------|-------------|--|------|-----------------------|-------------|--------|
| Pin  | DB25 | Func   | Purp        |  | pin  | Func                  | Purp        |        |
| 1    | 1    | IO34   | Coolant On  |  | 1    | OUT 2                 | Coolant On  |        |
| 2    | 14   | IO35   | vfd pwm     |  | 2    | X STEP                | x step      |        |
| 3    | 2    | IO36   | x step      |  | 3    | X DIR                 | x dir       |        |
| 4    | 15   | IO37   | fault state |  | 4    | Y STEP                | y step      |        |
| 5    | 3    | IO38   | x dir       |  | 5    | YDIR                  | ydir        |        |
| 6    | 16   | IO39   | charge pump |  | 6    | Z STEP                | z step      |        |
| 7    | 4    | IO40   | y step      |  | 7    | Z DIR                 | zdir        |        |
| 8    | 17   | IO41   | Spindle On  |  | 8    | A STEP                |             |        |
| 9    | 5    | IO42   | ydir        |  | 9    | A DIR                 |             |        |
| 10   | 18   | GND    | gnd         |  | 10   | IN 1                  | x home      | -ve nc |
| 11   | 6    | IO44   | z step      |  | 11   | IN 2                  | y home      | -ve nc |
| 12   | 19   | GND    | gnd         |  | 12   | IN 3                  | x home      | -ve nc |
| 13   | 7    | IO44   | zdir        |  | 13   | IN 4                  | spare       |        |
| 14   | 20   | GND    | gnd         |  | 14   | VFD PWM (50HZ)        | vfd pwm     |        |
| 15   | 8    | IO45   |             |  | 15   | FAULT                 | fault state |        |
| 16   | 21   | GND    | gnd         |  | 16   | CHARGE PUMP (>10 KHZ) | charge pump |        |
| 17   | 9    | IO46   |             |  | 17   | OUT 1                 | Spindle On  |        |
| 18   | 22   | GND/5V | gnd         |  | 18   | GND                   | gnd         |        |
| 19   | 10   | IO47   | x home      |  | 19   | GND                   | gnd         |        |
| 20   | 23   | GND/5V | gnd         |  | 20   | GND                   | gnd         |        |
| 21   | 11   | IO48   | y home      |  | 21   | GND                   | gnd         |        |
| 22   | 24   | GND/5V | gnd         |  | 22   | GND                   | gnd         |        |
| 23   | 12   | IO49   | x home      |  | 23   | GND                   | gnd         |        |
| 24   | 25   | GND/5V | gnd         |  | 24   | GND                   | gnd         |        |
| 25   | 13   | IO50   | spare       |  | 25   | GND                   | gnd         |        |
| 26   | xx   | GND/5V |             |  |      |                       |             |        |