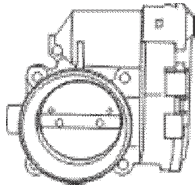


## Drive By Wire

### Connections



DBW Idle

## ECU

### Analogue Voltage Inputs

|                              |  |      |                                             |
|------------------------------|--|------|---------------------------------------------|
| <input type="checkbox"/> B13 |  | GY/Y | <b>AVI1</b>                                 |
| <input type="checkbox"/> A16 |  | O/B  | <b>AVI2</b> → Manifold Pressure Sensor      |
| <input type="checkbox"/> A17 |  | O/R  | <b>AVI3</b> → Mass Air Flow 1 Sensor        |
| <input type="checkbox"/> A2  |  | O/Y  | <b>AVI4</b> → Oil Temperature Sensor        |
| <input type="checkbox"/> B20 |  | O/G  | <b>AVI5</b> → A/C Request                   |
| <input type="checkbox"/> B12 |  | GY/O | <b>AVI6</b> → Wideband O2 1 Sensor          |
| <input type="checkbox"/> B3  |  | GY   | <b>AVI7</b> → Intake Air Temperature Sensor |
| <input type="checkbox"/> B4  |  | V    | <b>AVI8</b> → Coolant Temperature Sensor    |
| <input type="checkbox"/> A15 |  | Y    | <b>AVI9</b> → Fuel Pressure Sensor          |
| <input type="checkbox"/> A14 |  | W    | <b>AVI10</b> → Throttle Position Sensor     |

### Digital Pulsed Outputs

|                              |  |      |                                            |
|------------------------------|--|------|--------------------------------------------|
| <input type="checkbox"/> B25 |  | BR/B | <b>DBW1 P1</b>                             |
| <input type="checkbox"/> B26 |  | BR/R | <b>DBW1 P2</b>                             |
| <input type="checkbox"/> A18 |  | V/B  | <b>DPO1</b> → Tacho                        |
| <input type="checkbox"/> A1  |  | V/BR | <b>DPO2</b>                                |
| <input type="checkbox"/> A23 |  | V/R  | <b>DPO3</b> → Thermofan 1 Relay/Controller |
| <input type="checkbox"/> B19 |  | V/O  | <b>DPO4</b> → IGN RELAY                    |
| <input type="checkbox"/> A24 |  | B/Y  | <b>DPO5</b> → Fuel Pump Relay/Controller   |
| <input type="checkbox"/> A25 |  | B/R  | <b>DPO6</b>                                |
| <input type="checkbox"/> A3  |  | Y/B  | <b>IGN1</b> → Ignition Output 1            |
| <input type="checkbox"/> A4  |  | Y/R  | <b>IGN2</b> → Ignition Output 2            |
| <input type="checkbox"/> A5  |  | Y/O  | <b>IGN3</b> → Ignition Output 3            |
| <input type="checkbox"/> A6  |  | Y/G  | <b>IGN4</b> → Ignition Output 4            |
| <input type="checkbox"/> A7  |  | Y/BR | <b>IGN5</b>                                |
| <input type="checkbox"/> A8  |  | Y/L  | <b>IGN6</b>                                |
| <input type="checkbox"/> B17 |  | Y/V  | <b>IGN7</b>                                |
| <input type="checkbox"/> B18 |  | Y/GY | <b>IGN8</b>                                |
| <input type="checkbox"/> A19 |  | L    | <b>INJ1</b> → Stage 1 - Injection Output 1 |
| <input type="checkbox"/> A20 |  | L/B  | <b>INJ2</b> → Stage 1 - Injection Output 2 |
| <input type="checkbox"/> A21 |  | L/BR | <b>INJ3</b> → Stage 1 - Injection Output 3 |

## ECU

### Digital Pulsed Outputs

|                          |     |                                                                                   |      |                                            |
|--------------------------|-----|-----------------------------------------------------------------------------------|------|--------------------------------------------|
| <input type="checkbox"/> | A22 |  | L/R  | <b>INJ4</b> → Stage 1 - Injection Output 4 |
|                          | A27 |  | L/O  | <b>INJ5</b>                                |
| <input type="checkbox"/> | A28 |  | L/Y  | <b>INJ6</b> → A/C Clutch                   |
| <input type="checkbox"/> | A29 |  | L/G  | <b>INJ7</b> → Idle Control - Slave         |
| <input type="checkbox"/> | A30 |  | L/V  | <b>INJ8</b> → Idle Control - Main          |
|                          | A31 |  | G    | <b>STEP1 P1</b>                            |
|                          | A32 |  | G/B  | <b>STEP1 P2</b>                            |
|                          | A33 |  | G/BR | <b>STEP1 P3</b>                            |
| <input type="checkbox"/> | A34 |  | G/R  | <b>STEP1 P4</b> → Check Engine Light       |

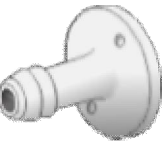
### Home Input

|    |                                                                                   |   |             |
|----|-----------------------------------------------------------------------------------|---|-------------|
| B2 |  | Y | <b>Home</b> |
|----|-----------------------------------------------------------------------------------|---|-------------|

### Knock Inputs

|                          |     |                                                                                   |      |                                       |
|--------------------------|-----|-----------------------------------------------------------------------------------|------|---------------------------------------|
| <input type="checkbox"/> | B21 |  | GY/G | <b>Knock Input 1</b> → Knock Sensor 1 |
|                          | B22 |  | GY/L | <b>Knock Input 2</b>                  |

### Pressure Inputs

|                          |                                                                                    |  |                                           |
|--------------------------|------------------------------------------------------------------------------------|--|-------------------------------------------|
| <input type="checkbox"/> |  |  | <b>OBPS1</b> → Barometric Pressure Sensor |
|--------------------------|------------------------------------------------------------------------------------|--|-------------------------------------------|

### Sync Pulsed Inputs

|                          |     |                                                                                     |       |                                                |
|--------------------------|-----|-------------------------------------------------------------------------------------|-------|------------------------------------------------|
| <input type="checkbox"/> | B8  |  | GY    | <b>SPI1</b> → Vehicle Speed Drive Train Sensor |
|                          | B9  |  | GY/B  | <b>SPI2</b>                                    |
| <input type="checkbox"/> | B10 |  | GY/BR | <b>SPI3</b> → Radr Out                         |
|                          | B7  |  | GY/R  | <b>SPI4</b>                                    |

### Stepper Outputs

|     |                                                                                     |      |                |
|-----|-------------------------------------------------------------------------------------|------|----------------|
| A31 |  | G    | ] <b>STEP1</b> |
| A32 |  | G/B  |                |
| A33 |  | G/BR |                |
| A34 |  | G/R  |                |

### System References

|                          |     |                                                                                     |     |                                              |
|--------------------------|-----|-------------------------------------------------------------------------------------|-----|----------------------------------------------|
| <input type="checkbox"/> | A9  |  | O   | <b>+5V DC</b> → 5V Sensors                   |
| <input type="checkbox"/> | A12 |  | O/W | <b>+8V Sensor Supply</b> → 8V Sensors        |
| <input type="checkbox"/> | B11 |  | R/W | <b>+12V ECU Power</b> → Fused Power from ECR |
| <input type="checkbox"/> | A13 |  | P   | <b>+12V Ignition Input</b> → Ignition Switch |
| <input type="checkbox"/> | A26 |  | R/L | <b>+12V Injector Power</b> → 20A Fused Power |
| <input type="checkbox"/> | A10 |  | B   | ] <b>Battery Ground</b> → Battery (-ve)      |
|                          | A11 |  | B   |                                              |

## ECU

### System References

|                               |                                                                                   |     |                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------|-----|-----------------------------------------------------------------|
| <input type="checkbox"/> AUX2 |  | B   | <b>CAN Ground</b> → CAN Signal Ground                           |
| <input type="checkbox"/> AUX3 |  | W   | <b>CAN High - Aux connector</b> → CAN High (Haltech CAN System) |
| <input type="checkbox"/> B23  |  | W   | <b>CAN High - Main Connector</b> → CAN High (Vehicle Bus)       |
| <input type="checkbox"/> AUX4 |  | L   | <b>CAN Low - Aux connector</b> → CAN Low (Haltech CAN System)   |
| <input type="checkbox"/> B24  |  | L   | <b>CAN Low - Main Connector</b> → CAN Low (Vehicle Bus)         |
| <input type="checkbox"/> AUX1 |  | R   | <b>CAN Power</b> → 3 Amp limit                                  |
| A25                           |  | B/R | <b>ECR Out</b>                                                  |
| <input type="checkbox"/> B2   |  | Y   | <b>Home (+ve)</b> → Home System (+)                             |
| B6                            |  | G   | <b>Home (-ve)</b>                                               |
| <input type="checkbox"/> B14  |  | B/W | <b>Signal Ground</b> → 0V Sensors                               |
| <input type="checkbox"/> B15  |  | B/W |                                                                 |
| <input type="checkbox"/> B16  |  | B/W |                                                                 |
| <input type="checkbox"/> B1   |  | Y   | <b>Trigger (+ve)</b> → Trigger System (+)                       |
| <input type="checkbox"/> B5   |  | G   | <b>Trigger (-ve)</b> → Trigger System (-)                       |