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|----|-------------|------------------------------------|-------------------------------------------------------------|
| 1 | VBATT | Battery Voltage Direct | Direct Battery Power 6-15V |
| 2 | VKEY | Ignition Key Input | Switched 12V |
| 3 | GROUND | Power Ground | |
| 4 | INJ1 | Injector 1 | |
| 5 | INJ2 | Injector 2 | |
| 6 | INJ3 | Injector 3 | |
| 7 | INJ4 | Injector 4 | |
| 8 | DIG_GND | Crank/Cam Sensor Ground | Digital Ground |
| 9 | CRANK | Crank Sensor | Variable Reluctance or Hall Effect Input |
| 10 | CAM1 | Camshaft Sensor Input 1 | Variable Reluctance or Hall Effect Input |
| 11 | TCOOL | Coolant Temp Input | 0-5V Analog Input 3.16k Pull-up to VREF |
| 12 | TAIR | Air Temp Input | 0-5V Analog Input 3.16k Pull-up to VREF |
| 13 | IGN1 | TTL/Power Ignition Coil 1 | Hardware selected output type |
| 14 | IGN2 | TTL/Power Ignition Coil 2 | Hardware selected output type |
| 15 | IGN3 | TTL/Power Ignition Coil 3 | Hardware selected output type |
| 16 | IGN4 | TTL/Power Ignition Coil 4 | Hardware selected output type |
| 17 | LINEAR1 | Analog Input | 0-5V Analog Input 47k Pull-up to VREF (or Pull-down to GND) |
| 18 | CAM2 | Cam / Wheel Speed Input | Variable Reluctance or Hall Effect Input |
| 19 | NTC_GND1 | Temp Sensors Ground | Analog Ground |
| 20 | LAMBDA1 | Lambda Sensor 1 | Very Weak Bias to 450mV |
| 21 | CANH | CAN High | |
| 22 | CANL | CAN Low | |
| 23 | W_EN | Write Enable | |
| 24 | MAIN_RELAY | Main Relay Output | Relay Output |
| 25 | FPUMP_RELAY | Fuel Pump Relay Output | Relay Output |
| 26 | PWM1 | Idle Control Valve Output | High Current Output |
| 27 | PWM2 | Boost Control Valve Output | High Current Output |
| 28 | TPU_OUT1 | Tacho Output | High Current Output |
| 29 | TPU_OUT2 | Variable Cam Timing Control Output | High Current Output |
| 30 | ANALOG_GND1 | TPS & MAP Ground | Analog Ground |
| 31 | NTC_1 | NTC Sensor Input | 0-5V Analog Input 3.16k Pull-up to VREF |
| 32 | TPS1 | Throttle Position Sensor Input | 0-5V Analog Input 47k Pull-up to VREF (or Pull-down to GND) |
| 33 | MAP | Manifold Pressure Sensor Input | 0-5V Analog Input 47k Pull-up to VREF |
| 34 | VREF1 | TPS & MAP Reference Voltage | 5V Reference |
| 35 | GROUND | Power Ground | |

| Pin | Name | Description | Notes |
|-----|-----------|---------------------------|-------------------------------------------------------------|
| 1 | IGN5 | TTL/Power Ignition Coil 5 | Hardware selected output type |
| 2 | IGN6 | TTL/Power Ignition Coil 6 | Hardware selected output type |
| 3 | AUX1 | Auxiliary Output 1 | 3A Output |
| 4 | AUX2 | Auxiliary Output 2 | 3A Output |
| 5 | HBRIDGE+ | DC Motor Positive | 7A DC Motor Control |
| 6 | HBRIDGE- | DC Motor Negative | 7A DC Motor Control |
| 7 | FANS | Cooling Fan Relay Output | 3A Output |
| 8 | SHIFT | Shift Lamp Output | 3A Output |
| 9 | PWM3 | PWM Output | 3A High Speed Output |
| 10 | PWM4 | PWM Output | 3A High Speed Output (shared with H-Bridge) |
| 11 | WSPEED1 | Wheel Speed Input 1 | Hall Effect Input |
| 12 | WSPEED2 | Wheel Speed Input 2 | Hall Effect Input |
| 13 | WSPEED3 | Wheel Speed Input 3 | Hall Effect Input |
| 14 | WSPEED4 | Wheel Speed Input 4 | Hall Effect Input |
| 15 | LAMBDA2 | Lambda Sensor 2 | 0-5V Analog Input Weak Bias to 450mV |
| 16 | LINEAR2 | Analog Input | 0-5V Analog Input 47k Pull-up to VREF (or Pull-down to GND) |
| 17 | LINEAR3 | Analog Input | 0-5V Analog Input 47k Pull-up to VREF (or Pull-down to GND) |
| 18 | LINEAR4 | Analog Input | 0-5V Analog Input 47k Pull-up to VREF (or Pull-down to GND) |
| 19 | LINEAR5 | Analog Input | 0-5V Analog Input 47k Pull-up to VREF (or Pull-down to GND) |
| 20 | NTC_2 | NTC Sensor Input | 0-5V Analog Input 3.16k Pull-up to VREF |
| 21 | NTC_3 | NTC Sensor Input | 0-5V Analog Input 3.16k Pull-up to VREF |
| 22 | SENS_GND2 | Analog Ground | Sensor Ground |
| 23 | VREF2 | Voltage Reference | 5V Reference |