

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Model LDVDSV2-1587

Advanced OBDII Data Streamer

The B&B Electronics AutoTap[™] OBDII Data Streamer Model LDVDSV2 connects your PC, driver terminal, Java-enabled phone, or other on-board computing device to the OBDII diagnostic bus of light and medium duty vehicles. It enables the retrieval of the most commonly used parameters of value in telematics and fleet management applications.

The LDVDSV2 provides a simple operational protocol to communicate to the OBDII bus. It provides a common interface and deterministic response time for all vehicles. The complete Command and Response protocol is published on B&B's website www.rvdstreamer.com.



On-Board Computer w/GPS & Wireless

Supported Vehicles

The OBDII Streamer supports any 1996 or newer vehicles that comply with the SAE's J1979 OBDII specification.

Supported Protocols

- SAE J1850 VPW
- SAE J1850 PWM
- SAE J2284/ ISO 15765 (CAN)
- ISO 9141-2
- ISO 14230-4 (KWP2000)

Supported Parameters

- Vehicle Identification Number
- · Vehicle Speed Monitor aggressive driving
- Engine Speed Monitor idle time and engine abuse
- Throttle Position
- Odometer/Distance Traveled Monitor trip distance and HOS
- Instantaneous Fuel Rate in Gallons per Hour
- · Total Fuel Monitor MPG & Protect against theft
- Ignition status Track Idle time
- Battery Voltage Watch for charging system failures
- PTO Status Automatically figure fuel tax savings
- Diagnostic Trouble Codes
- MIL Status
- Emissions Readiness Monitors Check remotely if vehicles are ready for emissions certification
- Brake Switch Status and Seatbelt Fastened available on most Ford & GM trucks/vans
- Other parameters available on a custom basis



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Additional Features

Outputs OBDII data in a J1708 data format

Ignition-On Signal Output

Status LED's for vehicle connection and power

	Red	Green	Red	Actual State	Customer Description
	LED	LED	LED		
	(Power)	(Activity)	(Debug)		
1	On	On	Off	Normal operation	Normal operation
2	On	SB	Off	Detecting vehicle	Detecting vehicle
3	Off	FB	Off	Database version mismatch	Database needs to be
					updated
4	Off	SB	Off	Update in progress	Update in progress
5	Off	VSB	VSB	Device asleep	Device asleep
6	Off	Off	Off	Device unpowered	Device unpowered
7	Off	On	FB	Error FPGA Image Invalid	Firmware needs to be
					updated
8	Off	Off	FB	Error with EMM code	Update System Manager
9	Off	Off	FB	EMM checking CRC of	Wait 10 seconds if state
				Images	does not change see 8
10	Off	SB	FB	Error writing/reading	Restart update of current
				to/from flash during update	component

LED state descriptions:

- On (LED ON): lit, solid
- Off (LED OFF): unlit
- FB (LED FAST): Alternating on-off; 125ms on, 125ms off
- SB (LED SLOW): Alternating on-off; .5 sec on, .5 sec off
- VSB (LED_VERY_SLOW): Alternating on-off; .25 sec on, 2 sec off
- Automatic low power mode senses when vehicle speed & engine speed is zero.
- Automatic disconnect when technician scan tool is connected (Requires separate OBDII Y-Cable)
- Proprietary vehicle detection algorithm and embedded database lets the same hardware work on all compliant vehicles
- Wide Operating Temperature: $-40 \text{ to } 85 \,^{\circ}\text{C} \, (-40 \text{ to } 185 \,^{\circ}\text{F})$
- Low Power Consumption: 2W in Operating Mode; 0.15W in Automatic Sleep Mode (Key Off)



Available Form Factors

External Box



Vehicle Bus Connection: DB15 female

Pin 1 ISO9141 K/ Pins 4, 5: J1850-, J1850+

Pin 6, 7 Ground

Pin 9 Vehicle unswitched Vbat

Pin 10 ISO9141 L

Pin 11 Vehicle Vbat to external scan tool

Pin 12 CAN Low Pin 13 CAN High

RS-232 Connection: DB9 female, DCE

Pin 1 Optional Vbat Power in or VBat power out (2 separate build options)

 Pin 3
 J1708

 Pin 7
 Ground

 Pin 8
 J1708+

Dimensions: 4.1 x 1.7 x 0.8 in (104.1 x 43.2 x 20.3 mm)

Operating Voltage Range: 8 to 30 VDC Calculated MTBF: 111,440 Hours



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EMC Testing

Radiated RF Interference: SAE J1113/41
Load Dump and Transient Protection SAE J1113/11
ESD Immunity SAE J1113/13

Environmental Testing

Temperature Test:

Ten (10) temperature cycles as follows with unit operating normally

- 1. Room (25°C) to Tmin in 15 minutes.
- 2. Soak at Tmin 1 Hour with power removed from unit
- 3. Start unit at Tmin, confirm successful start by executing a command/response. Power-down unit. Maintain unit un-powered for one minute between power-ups.
 - 4. Repeat Step 3 three times
 - 5. Start unit at Tmin and ramp Tmin to Tmax in 30 minutes
 - 6. Operate at Tmax for 1 hour
 - 7. Ramp Tmax to Tmin in 15 minutes
 - 8. Repeat steps 1 through 7 nine times for a total of 10 cycles:
 - a. 5 cycles at Vmin input
 - b. 5 cycles at Vmax input

Vibration Test:

IEC 60068-2-6

10 sweeps of 10 to 500 to 10Hz at rate 0.5 oct/min. each axis. Level to be 10 to 36Hz, 0.06 in DA 36 to 500Hz, 4g's Unit must remain operational during and after the test.

Shock Test:

IEC 60068-2-27

18 to 50g's, 11ms, ½ sine pulses, 3 each direction each axis Unit must remain operational during and after the test.

Drop Test:

IEC 60068-2-32

10 Freefall drops from 1 meter onto concrete surface.

Drop 1 time one each face (6), 1 on a corner and the 3 edges of this corner.

The drop unit shall return to normal operation without physical damage.

