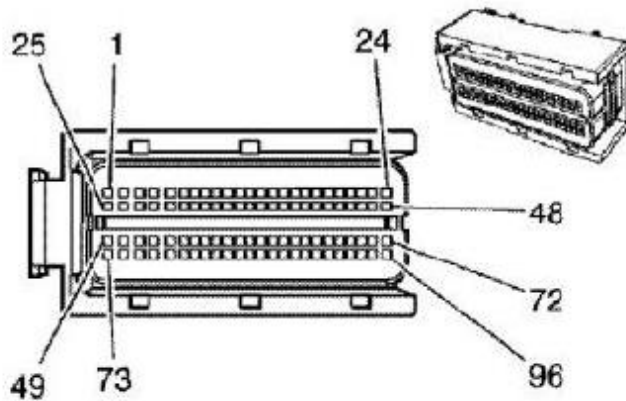# CORTEX EBC
2008-2010 Cobalt SS Specific Instructions
Rev 1.0.0

WIRING

The 2008-2010 Cobalt PCM is in the driver side of the engine bay directly in front of the fuse box. The PCM has two large connectors. Power, RPM, vehicle speed, and TPS signals can be accessed at these connectors.
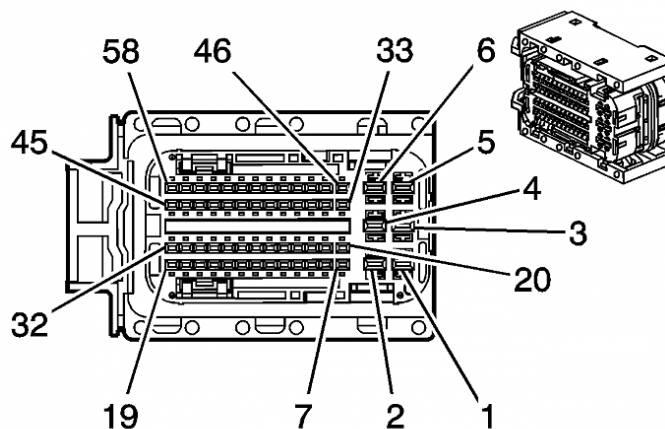
PCM CONNECTOR X1

The Cortex EBC wiring harness should be connected to the 96-pin X1 PCM connector as outlined in the following table.

CORTEX EBC SIGNAL	PCM SIGNAL	PCM PIN #	PCM WIRE COLOR
Engine Speed (RPM)	Intake Cam Position	7	Orange
TPS*	Throttle Position	90	Dark Green

* Optional for TPS based boost control and output activation.

PCM CONNECTOR X2

The Cortex EBC wiring harness should be connected to the 58-pin X2 PCM connector as outlined in the following table.

CORTEX EBC SIGNAL	PCM SIGNAL	PCM PIN #	PCM WIRE COLOR
+12V Power	Switched PCM Power	54	Pink
Ground	Connect to Chassis Near EBC	N/A	

The Speed Sensor Adapter should be connected to the 58-pin X2 PCM connector as outlined in the following table. The adapter can be connected to the same power and ground as the Cortex EBC.

SPEED SENSOR ADAPTER SIGNAL	PCM SIGNAL	PCM PIN #	PCM WIRE COLOR
Input 1 (Blue)	VSS High	53	Yellow
Input 2 (Green)	VSS Low	40	Purple

VEHICLE CONFIGURATION SETTINGS

RPM DETECTION:
- Pulses Per Cycle: 4
- Rotations Per Cycle: 2

SPEED DETECTION:
- Pulses Per Mile: 4,000
- VSS Scaler: 1/32

GEAR DETECTION:
- EVS Ratios: Determine using EVS Ratio displayed by logger while driving in each gear.

GPI CONFIGURATION FOR TPS:
- Mode: TPS
- Min TPS Voltage: Enter GPI Raw displayed by logger when throttle is closed (around 0.0 V).
- Max TPS Voltage: Enter GPI Raw displayed by logger when throttle is open (around 5.0 V).