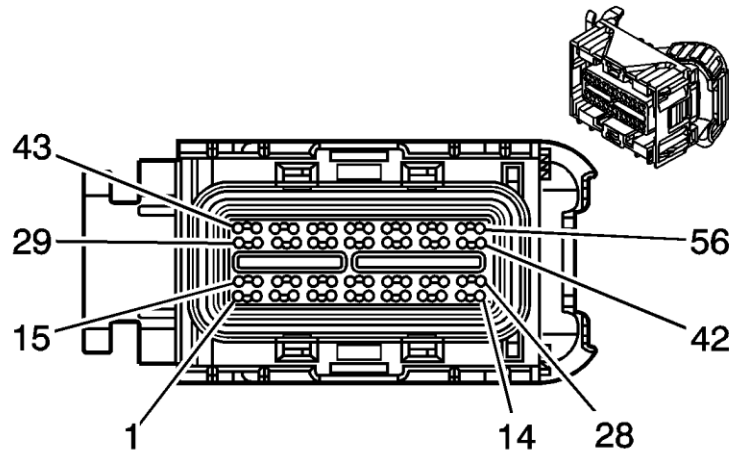# CORTEX EBC
2005-2007 Cobalt SS Specific Instructions
Rev 1.0.0

WIRING

The 2005-2007 Cobalt PCM is in the driver side of the engine bay directly in front of the fuse box. The PCM has three large connectors. Power, RPM, vehicle speed, and TPS signals can be accessed at these connectors. When the PCM is installed in the car the C1 connector will be at the top, the C2 connector will be in the middle, and the C3 connector will be at the bottom.
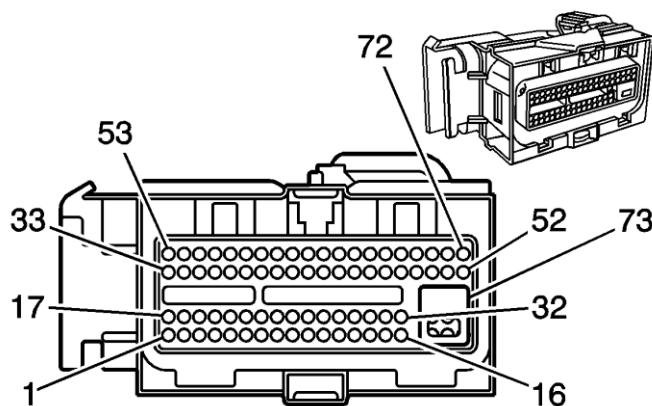
PCM CONNECTOR C1

The Cortex EBC wiring harness should be connected to the 56-pin C2 PCM connector as outlined in the following table.

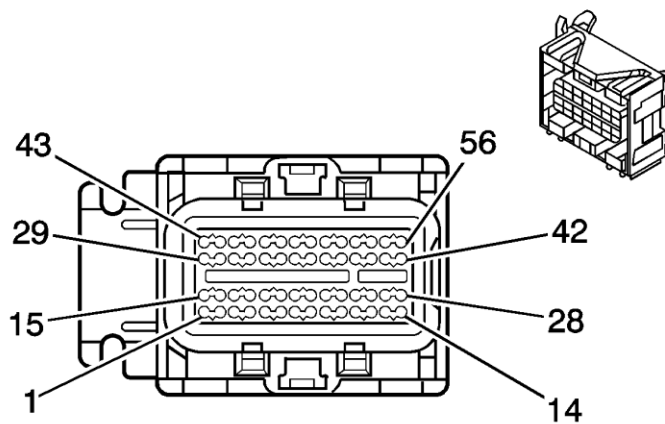| CORTEX EBC SIGNAL	PCM SIGNAL	PCM PIN #	PCM WIRE COLOR
+12V Power	Switched PCM Power	19	Pink / Black
Ground	Connect to Chassis Near EBC	N/A	

PCM CONNECTOR C2

The Cortex EBC wiring harness should be connected to the 73-pin C2 PCM connector as outlined in the following table.

CORTEX EBC SIGNAL	PCM SIGNAL	PCM PIN #	PCM WIRE COLOR
Engine Speed (RPM)	Intake Cam Position	26	Brown / White
TPS*	Throttle Position	2	Dark Green

* Optional for TPS based boost control and output activation.

PCM CONNECTOR C3

The Speed Sensor Adapter should be connected to the 56-pin C3 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	45	Yellow
Input 2 (Green)	VSS Low	44	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).