

# **Raptor VeeCAN**

Overview of Developing for the VeeCAN320 using the Raptor Platform



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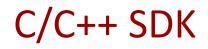




## Why Raptor VeeCAN?

- Customization
- Rapid prototyping
- Accessibility
  - Leverage application engineers familiar with Raptor or other model-based design tools to develop VeeCAN display applications





2	eventhandler.c display.h can.c $\times$ hard_h.h public.h public.c PCInterface.cpp
Solu	(Global Scope)
Solution Explorer	}
	//
4	<pre>□void process_rx_buffer(void)</pre>
	{
	<pre>// Read all the messages from the CAN driver into our buffers int conBent;</pre>
	<pre>int canPort; for (canPort = CAN_PORT1; canPort &lt; CAN_MAX_PORTS; canPort++)</pre>
	{
	// Check for CAN messages received
	CAN_MSG_T canMsg;
	<pre>while (can_receive_message(canPort, &amp;canMsg) == 0)</pre>
	{
	<pre>// Copy message to our buffer if(can ny head[canBent])</pre>
	<pre>if(can_rx_head[canPort]++ == can_rx_end[canPort])</pre>
	// ID
	<pre>can_rx_head[canPort]-&gt;arbitrator = canMsg.id &lt;&lt; 3;</pre>

// ID
can\_rx\_head[canPort]->arbitrator = canMsg.id << 3;</pre>

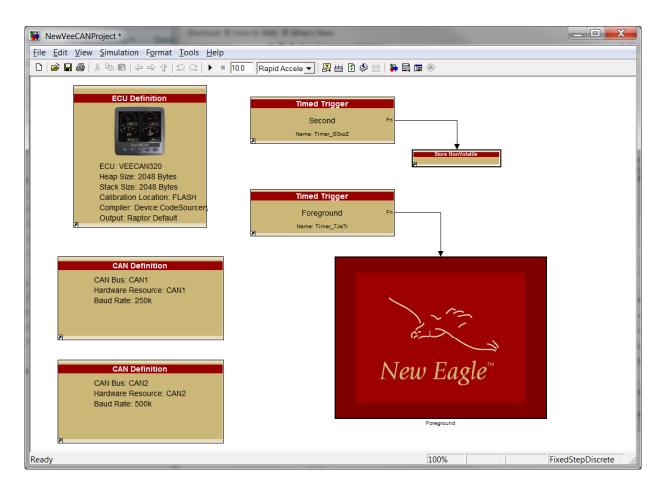
```
can_rx_head[canPort] = can_rx_start[canPort];
```

```
f(can_rx_head[canPort]++ == can_rx_end[canPort]
```

```
// Copy message to our buffe
```

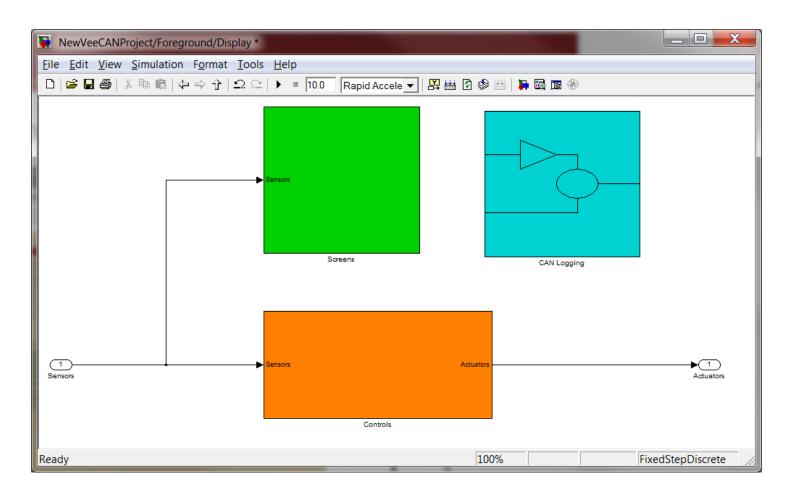








#### **Model-based Control**

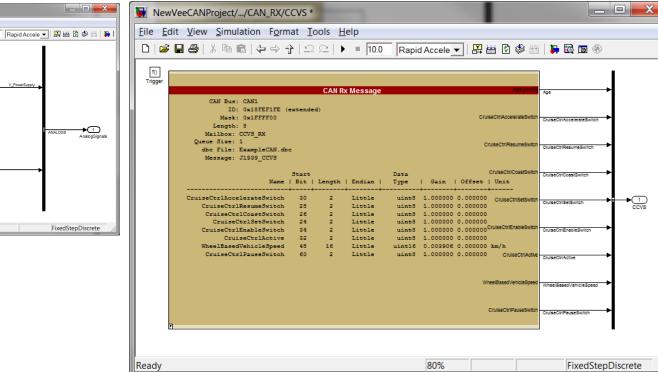


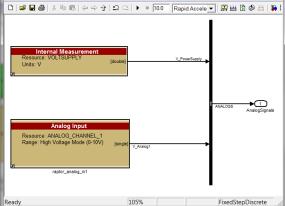


NewVeeCANProject/.../Sensors /Signals \*

Eile Edit View Simulation Format Tools Help

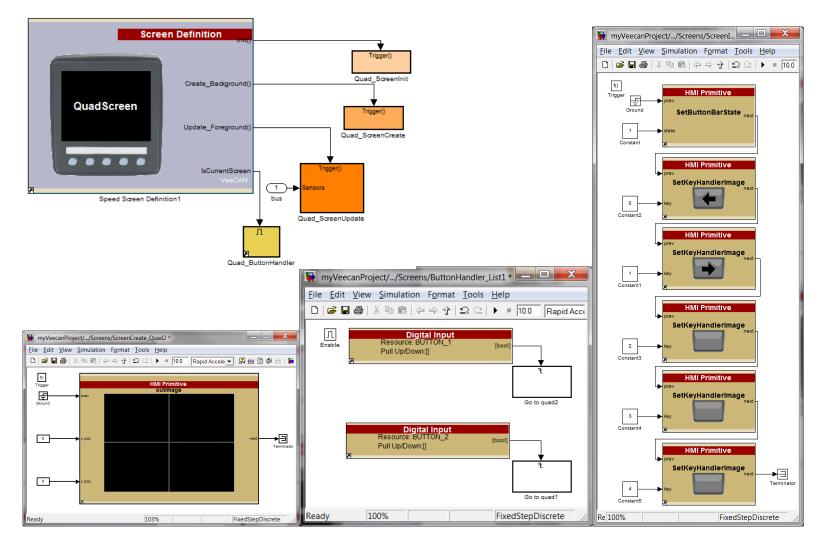
## Inputs (Analog, CAN)





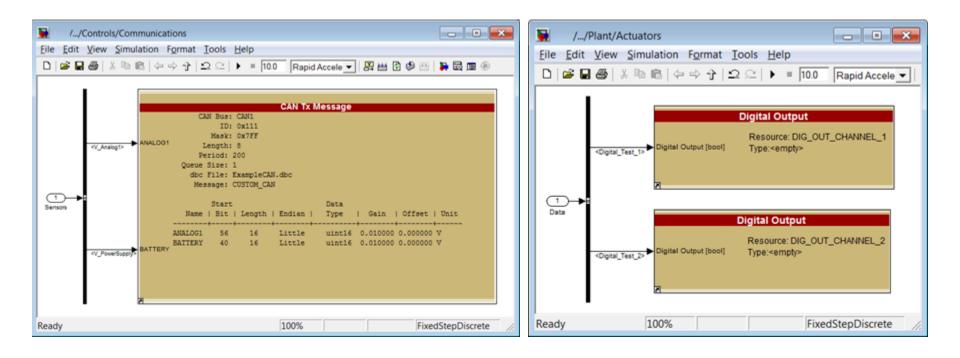


#### Screen Development



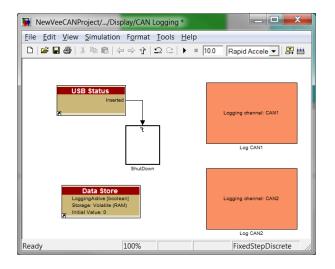


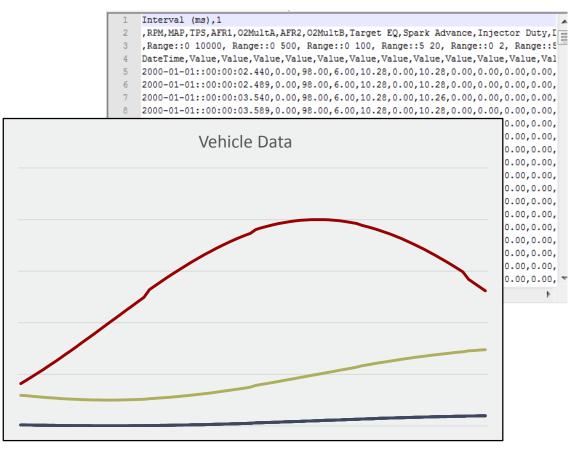
## Outputs (CAN, Digital)













## Building, Simulating



Source Block Parameters:raptor_tar			
— Target Definition Block (mask) (link) One of this block must exist in each Raptor model. Choose the target hardware as well as other global settings.			
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Parameters			
Target ECU VEECAN320	•		
Heap Size (bytes)			
2*1024			
Stack Size (bytes)			
2*1024			
Calibration Location Constant (FLASH)	-		
Compiler Device:CodeSourcery 2010.1.0.202 Si	mulator: 🔽		
Set Cu Device:None Simulator:None			
Device:None Simulator:Microsoft Visu Device:None Simulator:.NET v4.0	al Studio 2010 Pro		
Minimum Device:CodeSourcery 2010.1.0.202 S	mulator:None		
Device:CodeSourcery 2010.1.0.202 Simulator:Microsoft			
Device:CodeSourcery 2010.1.0.202 Simulator:.NET v4.0 Build Output Location Raptor Default			
OK Cancel Help	Apply		