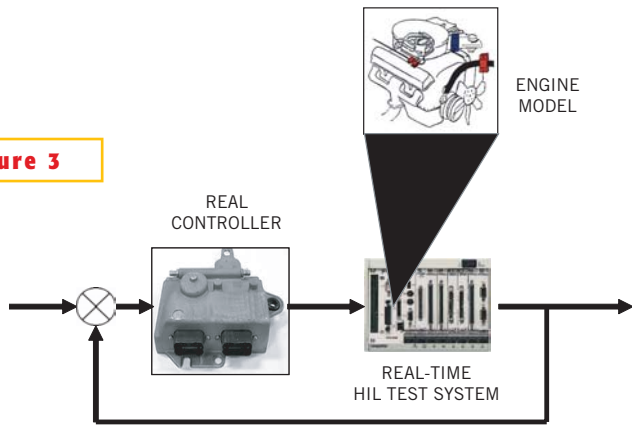


(a)



(b)

**Figure 3**

Rapid prototyping supports algorithm development by modeling the controller against a real hardware system or engine (a). HIL testing validates an actual controller against a simulated system on real-time hardware (b) (courtesy National Instruments).