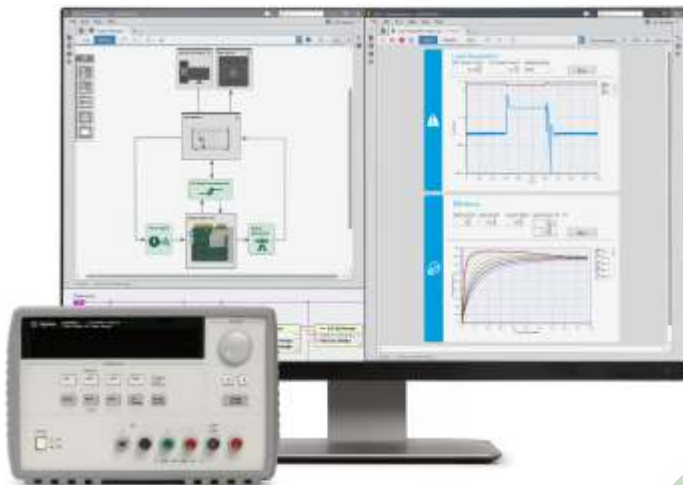# CompactRio

In a CompactRIO system, a controller with a processor and user-programmable FPGA is populated with one or more conditioned I/O modules from NI or third-party vendors. These modules provide direct sensor connectivity and specialty functions. CompactRIO is available in both a rugged industrial form factor and board-level design. It provides Faster Development With a Single, Intuitive Software Toolchain, Accurate, Precisely Timed Data You Can Trust It is an open and Secure Platform

The best reasons to consider a cRIO-based path are:

Features

>> Rapid prototyping
>> Lots of I/O to interface with the world
>> User Interface (GUI/HMI) options
>> Synchronization
>> Obsolescence Management
>> Several ways to communicate
>> Multiple variants possible