

Pushing Technology Limits...

## IoT-Datapoints with LabVIEW Embedded

Create your own Internet-of-Things Application based on a Low-Code Embedded-Device and a No-Code Connectivity-As-A-Service Platform.

### Start your IoT-Journey Today!

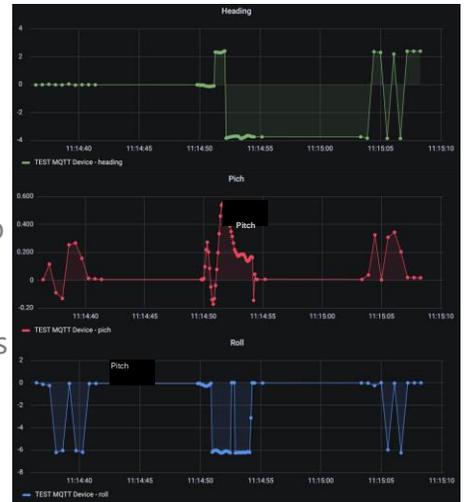
Akenza collaborated ([partnered?](#)) with Schmid Elektronik to bring an easy-to-use IoT-framework to life that you can leverage in your own IoT-applications. The example used here shows how an embedded-device reacts to movements and sends data to the Akenza platform with an incredible 10ms latency time and an unbelievable data resolution.

### From the Sensor to the Cloud in Record Time

Graphically develop the functionality of your data point on a modular hardware with NI LabVIEW. In this example, we captured heading, pitch and roll from the on-board inertial sensor module and added a timestamp to the data stream. You can easily add other measurement values like analog, digital or serial inputs or information received via all the supported fieldbuses or the GPS-Sensor. A JSON string (JavaScript Object Notation) is finally created and sent to the Akenza platform via MQTT (Message Queuing Telemetry Transport). On this universal IoT platform, you can use built-in data visualization for a direct overview of the data from your datapoint device, easily connect to a dashboard builder such as Grafana or use one of the plug & play Business Intelligence Modules.

### Leveraging Three Leading Technologies

The ZBrain product family from Schmid Elektronik consists of hardware platforms for embedded systems that are graphically programmable with NI LabVIEW. The underlying foundation is Linux that runs on a dual-core micro-processor, enhanced with an FPGA. This graphical, data-flow-oriented programming language integrates C, Python and M-Scripts, it features state charts and runs in real time and 24/7 on the embedded hardware. These low-code datapoints connect effortlessly with the IoT-Solution from Akenza in a super user-friendly way. Akenza is a self-service IoT platform, allowing you to build great IoT products and services with value. It connects, controls, and manages IoT devices, all in a single place.



```

JSON
{
  "data": {
    "Euler Angles": {
      "heading": -0.00333333,
      "pitch": -0.00444444,
      "roll": -0.00222230
    },
    "Timestamp": "14:41:49"
  }
}
    
```

