
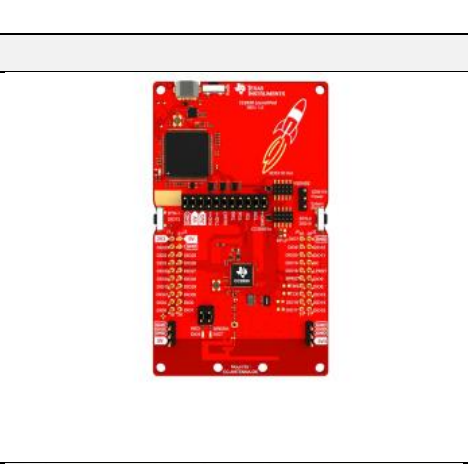




IIoT Equipment available within the Nordic IoT Hub

Item	Description	Diagram/Photo	User manual (URL/pdf)	Contact person
DTU-Photon				
Sigfox Access Station Micro	Standalone Sigfox Gateway with 3G/ETH interfaces		https://support.sigfox.com/products/#micro	Krzysztof Mateusz Malarski (krmal@fotonik.dtu.dk)
Sigfox SDR Dongle	USB Dongle with SMA connector; emulates Sigfox backend and can be used to e.g. test a PoC end-device Max. 5 devices can be registered		https://support.sigfox.com/products/#sdr	Krzysztof Mateusz Malarski (krmal@fotonik.dtu.dk)
IoT prototyping lab	Consisting of a complete PCB manufacturing pipeline: - soldering stations: WELLER WS80, PU81, JBC Nano rework machine, YIHUA YH-853AAA hot-iron station - CNC machine: WEGSTR Milling - Etching machine: PA210 - Double Side UV Light Exposure Machine - 3D printer: MakerBot Replicator+ - Laser printer: Epson P400 - Via machine: EZPICK - Precision lead reflow oven: ZB2520HL - Place stencil machine: eurocircuits eC-stencil-mate - Glue dispensing machine: TH-2004K		WELLER WS80 WELLER PU81 JBC Nano rework YIHUA YH-853AAA WEGSTR milling PA210 MakerBot Replicator+ Epson P400 EZPICK ZB2520HL eC-stencil-mate TH-2004K	Anas Mohamad Al Shalyan (amals@fotonik.dtu.dk)

Pycom FiPy board	(WiFi+LTE-M+NB-IoT+LoRa+Sigfox+BLE)		https://docs.pycom.io	Krzysztof Mateusz Malarski (krmal@fotonik.dtu.dk)
LTH-Auto				
DTU-Compute				
SimpleLink™ CC2650 wireless MCU LaunchPad™ Development Kit	<p>This LaunchPad is for the evaluation of CC2650.</p> <p>The CC2650 LaunchPad kit brings easy Bluetooth low energy connectivity to the LaunchPad kit ecosystem with the SimpleLink ultra-low power CC26xx family of devices. This LaunchPad kit also supports development for multi-protocol support for the SimpleLink multi-standard <u>CC2650 wireless MCU</u> and the rest of CC26xx family of products: CC2630 wireless MCU for ZigBee®/6LoWPAN and CC2640 wireless MCU for Bluetooth® low energy.</p>		http://www.ti.com/lit/zip/swrr147	Xenofon (Fontas) Fafoutis Assistant Professor, PhD, MIEEE Embedded Systems Engineering (ESE) xefa@dtu.dk
Developer board giving access to NB-IoT (bands 8 and 20)	<p>The SODAQ *SARA AFF N211 is an NB-IoT Supported, Arduino compatible. The board is equipped with: Microcontroller (Microchip Atmel SAMD21), GPS (uBlox M8Q for GPS, Galileo, GLONASS, and Beidou support), Sensors (LSM303AGR digital magnetometer and accelerometer).</p>		https://shop.sodaq.com/sodaq-sara-aff-n211.html	Alberto Nannarelli, DTU-Compute. Associate Professor alna@dtu.dk
LTH-EIT				
LTH-CS				

KTH				
NTNU				
<i>Industry 4.0 Lab</i>	<p>The Industry 4.0 lab is part of the MANULAB and consists of 5 robots:</p> <ul style="list-style-type: none"> • One ABB YuMi robot, which is a two armed collaborative robot • Two KUKA iiwa robots, which are 7DOF collaborative robots <p>Two KUKA KMR iiwa robots, which are AGVs with an iiwa robot on top.</p>	Coming soon	Coming soon	Adam Leon Kleppe
<i>Robotic Welding Lab</i>	<p>The Robotic Welding lab is part of the MANULAB and consists of 3 robot cells:</p> <ul style="list-style-type: none"> • Two robot welding cells for aluminum as they have CMT welding tools <p>One is the large welding cell, with two welding robots (TIG and MIG welding) and a large two-axis rotation table which can hold 1.5 tonnes.</p>	Coming soon	Coming soon	Adam Leon Kleppe
<i>Industrial Robotic Lab</i>	<p>The Industrial Robotic Lab consists of 4 robot cells (soon to be 5):</p> <ul style="list-style-type: none"> • The Milling cell: consisting of two KUKA KR120 robots which primarily is tooled for milling • The Small Welding cell: with a KUKA KR5 with TIG welding, used for small welding projects • The Assembly cell: with two KUKA KR6 robots with Robotiq gripper. This cell will soon be split into two. <p>The General Robotic cell: with a KUKA KR16 and a set of various tools.</p>	Coming soon	Coming soon	Adam Leon Kleppe
<i>5G lab</i>	<p>This is only in the starting phase, but we have gotten money to build a lab using 5G technology.</p>	Coming soon	Coming soon	Amund Skavhaug

Aalto				
Aalto Industrial Internet Campus. Kone cranes	Kone cranes industrial overhead crane. Ilmatar OIE is an open physical and digital development environment targeted for different third parties i.e. students, startups, SMEs, larger corporations or other parties, who want to innovate and develop new devices and applications that are connected to Konecranes overhead cranes.		https://www.aalto.fi/en/industrial-internet-campus/ilmatar-open-innovation-environment	Jari Juhanko jari.juhanko@aalto.fi