Slovenská technická univerzita v Bratislave Fakulta informatiky a informačných technológií

Ilkovičova 2, 842 16, Bratislava 4

Tímový projekt



Export úloh z nástroja JIRA

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Spolupráca: Ing. Lukáš Ondriga, Kistler Bratislava, s.r.o.

Názov tímu: TEST.IOT

Členovia tímu: Bc. Tomáš Bujna

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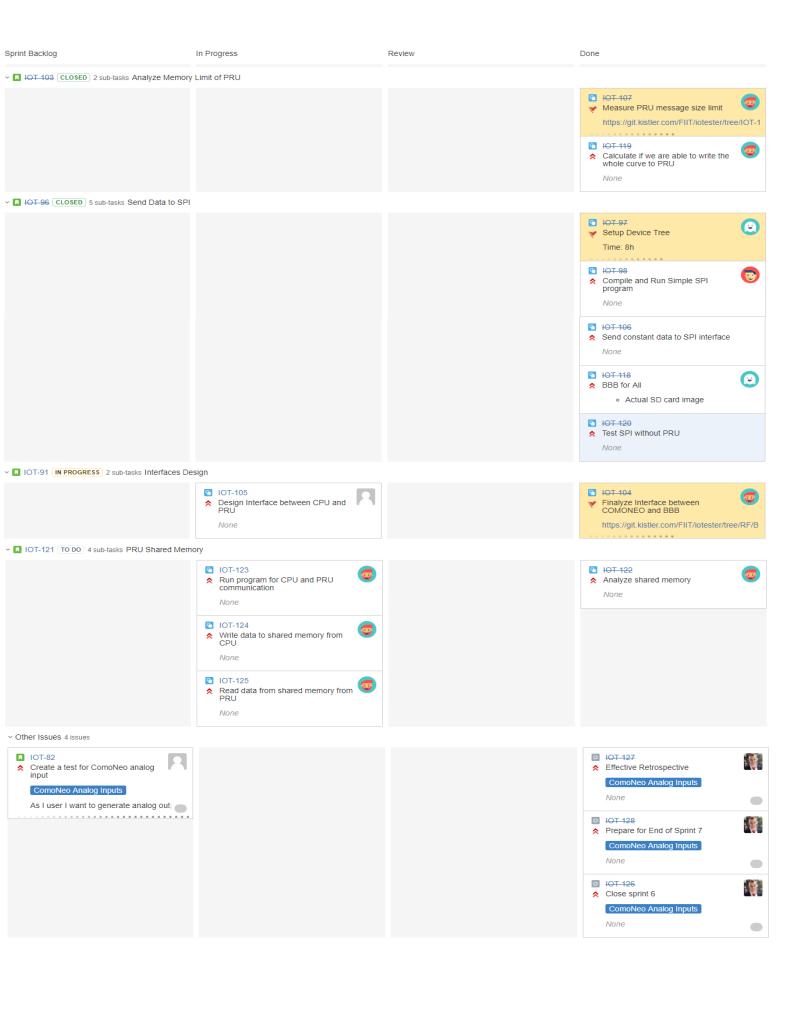
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Akademický rok: 2018/2019



Summary	Issue key	Issue Type	Status	Assignee	Description	Epic Link	Epic Name	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6	Sprint 7	Story	Task type
	Key	Туре			The goal of the porject is to enable automatic	LIIIK									Politics	
Project goal	IOT-78	Group	Group		testing of measuring devices. For this purpose it is necessary to develop a device able to generate various analog and digital signals which will simulate sensors and device states.											
Document how to use IoTester for devices other than ComoNeo	IOT-76	Group	Group													
Design	IOT-74	Group	Group													
					First prototype of the device is used to test ComoNeo:Â											
Environment	IOT-71	Group	Group		[https://www.kistler.com/en/applications/indust rial-process-control/plastic-process- monitoring/injection-molding-process- control/process-monitoring-with-comoneo/]											
REST API	IOT-75	Group	Group		On the basis of ComoNeo analysis create a REST API interface.											
Robot Framework	IOT-70	Group	Group		Examples of robot framework tests											
Tests Configuration of	IOT-77	Group	Group		demonstrates the functionality of IoTester. It is possible to set digital input signals over REST											
digital signals Configuration of	IOT-72	Group	Group		API. It is possible to configure analog signals over											
analog signals Configuration of	10172	огоар	огоар		REST API. REST API should not be ComoNeo specific. It											
various devices Document how to	IOT-73	Group	Group		should be possible to use the same data model for other devices.											
use IoTester for ComoNeo	IOT-64	Group	Group													
Tests integration into continuous integration system	IOT-60	Group	Group													
Implementation	IOT-62	Group	Group		The goal of the implementation is to provide several working automated tests of the ComoNeo device.											
Housing	IOT-61	Group	Group		3D printer housing models is designed.											
Hardware	IOT-63	Group	Group		Harware consists of reusable part and device specific part (e.g. ComoNeo connectors).											
Robot framework integration	IOT-66	Group	Group													
Robot Framework tests	IOT-67	Group	Group													
Architecture document	IOT-68	Group	Group													
High level architecture	IOT-65	Group	Group		Architecture document contains high level view on PRU, ARM, beaglebone, robot framework and ComoNeo relations.Â											
IoTester architecture	IOT-69	Group	Group		Architecture of the IoTester software is documented.											
Test examples implementation	IOT-55	Group	Group													
Project goal	IOT-57	Group	Group		REST API is documented. Documentation											
Documentation	IOT-56	Group	Group		contains description how to use the interface for different devices (not Lukáš Ondrigay for ComoNeo).											
Software IoTester	IOT-59	Group	Group													
implementation	IOT-58	Group	Group		As a developer of IoTester I need to send a simple											
Send Data to SPI	IOT-96	Story	Closed		message to SPI interface *Acceptance criteria:* * prepare a simple program to work with SPI interface - the program is compilable and possible to load into PRU * enabled SPI and GPIOS which are necessary to control DAC in the device tree * send simply message to SPI interface (possible to measure it by an oscilloscope)	IOT-36							IOT Sprint 6		13.0	
Test SPI without PRU	IOT-120	Sub-task	Closed										IOT Sprint 6	IOT Sprint 7		
Send constant data to SPI interface	IOT-106	Sub-task	Closed										IOT Sprint 6	IOT Sprint 7		
Compile and Run	IOT-98	Sub-task	Closed	Filip Starý									IOT	IOT		
Simple SPI program	50			.,,	* Actual SD card image								Sprint 6	Sprint 7		
BBB for All	IOT-118	Sub-task	Closed	Rastislav Kováč	* Code composer								IOT Sprint 6	IOT Sprint 7		
Close sprint 6	IOT-126	Task	Closed	Stanislav Širka		ЮТ-36								IOT Sprint 7		
Prepare for End of Sprint 7	IOT-128	Task	Closed	Stanislav Širka		IOT-36								IOT Sprint 7		
Effective Retrospective	IOT-127	Task	Closed	Stanislav Širka		IOT-36								IOT Sprint 7		
Test analog inputs on ComoNeo	IOT-36	Epic	To Do		As a user I want to be able to test an analog output on IoTester to be able to test analog input of ComoNeo. Acceptance criteria: ** configures IoTester to send an analog signal ** checks if the signal was measured by ComoNeo		ComoNeo Analog Inputs									
Finalyze Interface between COMONEO and BBB	IOT-104	Sub-task	Closed	Tomáš Bujna	https://git.kistler.com/FIIT/iotester/tree/RF/BBB/ RESTAPI						IOT Sprint 4	IOT Sprint 5	IOT Sprint 6	IOT Sprint 7		
and DDD					Time: 8h											
Setup Device Tree	IOT-97	Sub-task	Closed	Rastislav Kováč	Setup Device Tree Set pins 190/194/198/19c to mode 0x03 [Result https://files.slack.com/files-								IOT Sprint 6	IOT Sprint 7		
					pri/TCZR1HLDT-FGK3ZH075/pins.png] Â											

Measure PRU message size limit	IOT-107	Sub-task	Closed	Tomáš Bujna	https://git.kistler.com/FIIT/iotester/tree/IOT- 107/IOT- 107%20%5BMeasure%20PRU%20message%20si ze%20limit%5D						IOT Sprint 6	IOT Sprint 7		
Run program for CPU and PRU	IOT-123	Sub-task	In Progress	Tomáš Bujna	ZE%ZUIIIIIL%SD							IOT Sprint 7		
communication Analyze shared memory	IOT-122	Sub-task	Closed	Tomáš Bujna								IOT Sprint 7		
Design Interface between CPU and PRU	IOT-105	Sub-task	In Progress	lgor Labát					IOT Sprint 4	IOT Sprint 5	IOT Sprint 6	IOT Sprint 7		
Calculate if we are able to write the whole curve to PRU	IOT-119	Sub-task	Closed	Tomáš Bujna							IOT Sprint 6	IOT Sprint 7		
Analyze Memory Limit of PRU	IOT-103	Story	Closed		As a developer of loTester I need to measure the size limit of PRU message system Acceptance criteria: * measure PRU message size limit * measure if we are able to write the whole curve to PRU	IOT-36					IOT Sprint 6	IOT Sprint 7	5.0	
Read data from shared memory from PRU	IOT-125	Sub-task	In Progress	Tomáš Bujna								IOT Sprint 7		
Write data to shared memory from CPU	IOT-124	Sub-task	In Progress	Tomáš Bujna								IOT Sprint 7		
PRU Shared Memory	IOT-121	Story	To Do		{color:#333333}As a developer I want to write/read data into/from shared memory of PRU so that we can store data for signal generation.{color}	IOT-36						IOT Sprint 7	13.0	
Interfaces Design	IOT-91	Story	In Progress	Stanislav Širka	As a developer of loTester I need a design of the communication message between PRU and CPU. Acceptance criteria: * message should be easy to use for PRU (no parsing, no caching in PRU,) * message will support all digital outputs and analog outputs usable on loTester * documentation of the message - will contain reasoningA * the basic idea how to create this message in CPU is described	IOT-36			IOT Sprint 4	IOT Sprint 5	IOT Sprint 6	IOT Sprint 7	13.0	
Decide on Our Guidelines	IOT-29	Task	Closed											
Analyze Analog Output of DAC	ют-99	Story	Closed		As a developer of loTester I need to have a basic understanding of how to communicate with DAC, how to setup DAC to get desire analog value * analyze how the DAC chip is connected to the board (SPI, GPIO3) - which BBB pins are used to control DAC - as an output prepare a simple sketch of PIN description * analyze how to use DACså [http://www.ti.com/lit/ds/symlink/dac87 34.pdf] # what data should be sent via SPI interface to get desired analog value. # how to command DAC to set the analog output * team understands the concept of daisy-chain Å [https://www.maximintegrated.com/en/app-notes/index.mvp/id/3947]	ЮТ-36					IOT Sprint 6		5.0	
Create a test for ComoNeo analog input	IOT-82	Story	To Do	Marián Ján Franko	As I user I want to generate analog output on IoTester and test the behaviour of ComoNeo firmware. Acceptance criteria: * Test sets the measurement start of the ComoNeo to a pin connected to IoTester * Test sets the analog output values to the IoTester (e.g. in 10 seconds sets 10 different values) * Test starts the measurement with digital output of IoTester (e.g. the Values) * Test starts the measurement with digital output of IoTester (e.g. the Values using cursor in ComoNeo web application (see the attachment) As a user of IoTester I need the documentation of	IOT-36						IOT Sprint 7		
Design REST API	IOT-42	Story	To Do		REST API to be able to use this interface. Acceptance criteria: * REST API is not ComoNeo specific * REST API enables to set digital and analog outputs of lofester * Documentation of REST APIĀ Ä Hint: Analyse the data used in ComoNeo software simulator: [https://git.kistler.com/comong/comong-software/tree/masteri/core/lib/Fpga/Simulator] Various configurations of software simulator are available here in ApplicationFiles/Simulator folders: [https://git.kistler.com/comong/comong-software/tree/masteri/com/com/comong/comong-software/tree/master/Testing/RestApi-Robot/Setups]	ЮТ-40								

					T										
REST API for analog	IOT-83	Story	To Do		As a user of loTester I want to be able to set the analog and digital outputs. Acceptance criteria: * IoTester Rest API provides a call which allows to set digital and analog outputs of loTester * the RestAPI handler sends the data as a	IOT-36									
output of IoTester	10.103	3.0.7	10 50		message to RTU HINT:	10.130									
					The handler can prepare the data in a "RTU friendly" form.										
Run ComoNeo					As a user I want to test the measured data on ComoNeo.										
measurement with one curve	IOT-117	Story	To Do		Acceptance criteria: * one curve is set from REST API to the PRU * the curve contains 100 points * the curve is displayed on ComoNeo	IOT-36									
					As a user I want to use all analog and digital outputs of IoTester to be able to control ComoNeo.										
Enable multiple digital and analog outputs	IOT-86	Story	To Do		* Rest API is extended so that it allows configuration of all digital and analog outputs * RTU executes the configuration according defined timing	IOT-40									
					As a ComoNeo tester I want to be able to take the data for ComoNeo simulator and configure with the IoTester										
					Acceptance criteria: * Robot framework keyword which will load configuration from ComoNeo fpga simulator and configures IoTester via Rest API										
					ComoNeo Simulator input data description: [https://git.kistler.com/comong/comong-										
ComoNeo simulator data conversion	IOT-85	Story	To Do		software/tree/master/Core/lib/Fpga/Simulator] ComoNeo Simulator input data examples:	IOT-40									
					[https://git.kistler.com/comong/comong- software/tree/release-3.0/Testing/RestApi- Robot/Setups/2molds/ApplicationFiles/Simulator										
					[https://git.kistler.com/comong/comong- software/tree/master/Testing/RestApi- Robot/Setups/8c1p/ApplicationFiles/Simulator] Å										
Prepare Document for Board Design	IOT-49	Story	In Progress	Miroslav Sabo	As a hardware engineer, IÂ want to create document for board design, so that we can use it as a guideline for creating final design of our new board Â	IOT-1				IOT Sprint 3				8.0	
					As a user of IoTester I want to be able to run measurement on ComoNeo										
Run ComoNeo measurement	IOT-92	Story	In Progress	Rastislav Kováč	Acceptance criteria: * PRU application sets measurement start digital input of ComoNeo and sets one value to the DAC converter * The dac value is possible to set via REST API * Robot Framework test checks if the cycle started and checks if the value is as expected						IOT Sprint 4	IOT Sprint 5		21.0	
Kistler VPN Access Deployment	IOT-28 IOT-89	Task Epic	Closed To Do	Lukáš Ondriga			Deployment	IOT Sprint 1	IOT Sprint 2						
					As a user I want to have access to the IoTester REST API after boot.										
Start webserver automaticaly	IOT-116	Story	To Do		Acceptance criteria: * IoTester python webserver is added to Yocto build	IOT-89									
					* REST API is available after IoTester boot. As a user I want to have the PRU software loaded automaticaly after boot.										
Load PRU exe automaticaly	IOT-115	Story	To Do		Acceptance criteria: * PRU application is added to Yocto build * after the boot of generated image the PRU application is started	ЮТ-89									
Configuration					As a user of IoTester I want my device to be configured automaticaly with the correct device tree.										
Configure device tree for SD card image generation	IOT-114	Story	To Do		* device tree configuration added to Yocto layer * generated image can boot and device tree is configured in correct way (e.g. spi bits have correct mode)	IOT-89									
					As a developer of IoTester I need SD card image which contains flusk to be able to develop IoTester application.										
Add flusk into SD card image generation	IOT-113	Story	To Do		Acceptance criteria: * new layer added to yocto configuration * image configuration including flusk added * generated image can be load to the sd card and the flusk is installed	IOT-89									
					As a developer I need to be able to generate new										
					SD card image.										
SD card image generation	IOT-81	Story	To Do		SD card image. Acceptance criteria: * Script for building SD card image from existing yocto configuration for 1 Processors SDK is created * Script is available in Git repository * It is possible to load generated image to the SD										
	IOT-81	Story	To Do	Stanislav Širka	SD card image. Acceptance criteria: * Script for building SD card image from existing yocto configuration for Tl Processors SDK is created * Script is available in cit repository								IOT Sprint 6		

Prepare Presentation for Sprint 6	IOT-110	Task	Closed	Stanislav Širka									IOT Sprint 6		
Refactoring HW for better compactness	IOT-1	Epic	To Do				IoTester Refactoring								
New Informations in JIRA Tasks	IOT-112	Task	Closed	Stanislav Širka									IOT Sprint 6		
Export JIRA Tasks for Sprint 6 Start	IOT-109	Task	Closed	Stanislav Širka									Sprint 6 IOT Sprint 6		
Prepare Robot Framework test for testing cycle values	IOT-108	Task	In Progress	Marián Ján Franko		IOT-36							IOT Sprint 6		
Understands daisy-	IOT-102	Sub-task	In Progress	lgor Labát									IOT		
chain concept Basic understanding	IOT-100	Sub-task	Blocked	Igor Labát									Sprint 6		
of DAC Understand how the	101-100	Jub-task	DIOCKEG	igoi cabat									Sprint 6		
DAC chip is connected to the board (SPI, GPIOs)	IOT-101	Sub-task	Blocked	Miroslav Sabo									IOT Sprint 6		
Create Project Documentation for ZS	IOT-95	Story	Closed	Stanislav Širka								IOT Sprint 5		8.0	
Digital Input Test Integration	IOT-90	Story	Closed	Stanislav Širka		IOT-2					IOT Sprint 4	IOT Sprint 5		13.0	
Model Architecture	IOT-80	Task	Closed	Stanislav Širka						IOT Sprint 3	IOT Sprint 4				documentation
for Project					As a user I want to be able to set digital output						·				
Program for RTUexe Configuration	IOT-9	Story	Closed	Filip Starý	from RTU to be able to test ComoNeo digital input. Acceptance criteria: Running RTU program which sets the digital output of IOTester according configuration from	IOT-2					IOT Sprint 4			8.0	
Create First Document for	IOT-93	Story	Closed	Stanislav Širka	CPU.						IOT Sprint 4			8.0	
Project Close Sprint 3	IOT-93	Task	Closed	Stanislav Širka							IOT Sprint 4			5.0	
Testing digital inputs	IOT-2	Epic	To Do	January Sirkd			ComoNeo Digital Inputs				.c. op.mc4				
on ComoNeo	IOT-26	Task	Closed												documentation
Create Team Poster Decide on	IOT-22	Task	Closed												documentation
Continuous Server Call Program on RTU	IOT-19	Task	Closed			IOT-2									implementation
from CPU Analyze Communication Between RTU and	IOT-18	Task	Closed			IOT-2									analysis
CPU Analyze RTU	IOT-13	Task	Closed			IOT-2									analysis
Choose Simple Program for RTU	IOT-16	Task	Closed			IOT-2									analysis
RTU and Web Server Compatibility	IOT-14	Task	Closed			IOT-2									analysis
Load Program to RTU	IOT-17	Task	Closed	lgor Labát	As a user I want to be able to set digital output from RTU to be able to test ComoNeo digital input. Acceptance criteria: Running RTU program which sets the digital output of IOTester according configuration from CPU.	IOT-2		IOT Sprint 1	IOT Sprint 2	IOT Sprint 3					implementation
Methodics	IOT-44	Story	Closed	Stanislav Širka	Create methodic for: * Meeting Documentation * Tasks managment - done * Methodics - done * Code versioning - done * Web - done			IOT Sprint 1	IOT Sprint 2	IOT Sprint 3				3.0	
RTU and CPU Communication	IOT-8	Story	Closed	Filip Starý	As a user I need to configure real time simulation to run various simulations. Acceptance criteria: RTU and CPU prototype is running on Beaglebone Linux console.	IOT-2		IOT Sprint 1	IOT Sprint 2	IOT Sprint 3				5.0	
Load RTUexe	IOT-7	Story	Closed	lgor Labát	As a user I need to do a real time simulation to be able to simulate sensor measurements. Acceptance criteria: Loading of the program to the real time unit will be shown on Linux console.	IOT-2		IOT Sprint 1	IOT Sprint 2	IOT Sprint 3				13.0	
Jenkins pipeline for installation image	IOT-88	Story	To Do		As a user I want try the latest changes of the IoTester firmware. Acceptance criteria: * Jenkins pipeline which will be trigerred by the change in a giit branch and will compose the IoTester firmware	IOT-89									
Create Project Specification	IOT-25	Task	Closed	Lukáš Ondriga											documentation
Analyze, design, implement REST API	IOT-40	Epic	To Do				REST API								
Manage Kistler resources for PCB design	IOT-53	Task	Closed	Lukáš Ondriga						IOT Sprint 3					
Create Document for Tasks Managment	IOT-52	Task	Closed	Stanislav Širka						IOT Sprint 3					documentation
Presentation for Sprint 3 End	IOT-79	Task	Closed	Stanislav Širka						IOT Sprint 3					
Close Sprint 2 Create Document for	IOT-50	Task Task	Closed	Stanislav Širka Stanislav Širka						IOT Sprint 3					documentation
Jira Changes REST API Prototype	IOT-10	Story	Closed	Tomáš Bujna	As a user of IOTester I want to have interface to set the Como digital input to be able to configure IOTester. Acceptance criteria: * working webserver on beagleboard * implemented simple post request with value of digital input (0 or 1) * post request execution is logged to the console	IOT-2				IOT Sprint 3				3.0	

				As a test developer I want to have a library to use								
Robot Framework IOT-11	. Story	Closed	Marián Ján Franko	IOTester Acceptance criteria: *python module *keywords to set Como digital inputs are implemented HINT:Ä implementation of the keywords are POST requests to the IOTester POST request is implemented inÄ http://jira.kistler.com/browse/IOT-10	IOT-2			IOT Sprint 3			5.0	
Port IoTester specification to Jira	Task	Closed	Lukáš Ondriga					IOT Sprint 3				
Create a Test IOT-12	Story	Closed	Marián Ján Franko	As a user I want to test the ComoNeo digital input. Acceptance criteria: Test configures IoTester (library for IoTester configuration will be implemented in different user story) Test checks the ComoNeo web application if the digital input was set. Ä	IOT-2	IOT Sprint 1	IOT Sprint 2	IOT Sprint 3			13.0	
Analyze Board IOT-3	Story	Closed	Miroslav Sabo	As a hardware engineer I need to analyse the current board to be able to make the final design. Acceptance criteria: Document the current design of the board.	IOT-1	IOT Sprint 1	IOT Sprint 2				8.0	
Close Sprint 1 IOT-48	Task	Closed	Stanislav Širka	Close sprint 1. Create sprint 2. Export tasks from Jira.		IOT Sprint 2						
Create Team Website IOT-30		Closed	Tomáš Bujna			IOT Sprint 1					8.0	
Print User Stories 10T-47	Task	Closed	Stanislav Širka			IOT Sprint 1						
Choose Web Server Technology	Task	Closed	Rastislav Kováč		IOT-2	IOT Sprint 1						
Technology for Linux (Web Server)	Story	Closed	Rastislav Kováč	As a developer I want to select frameworks/technologies to be able to write REST API for BeagleBone Black real time unit configurations. Acceptance criteria: Document 3 alternatives with pros and cons.	IOT-2	IOT Sprint 1					5.0	
Create Methodic for Methodics IOT-45 Document	Task	Closed	Stanislav Širka			IOT Sprint 1						documentation
Export Data From Jira - Sprint 1 Start	Task	Closed	Stanislav Širka			IOT Sprint 1						
Add Tasks to Jira IOT-20	Task	Closed	Stanislav Širka	Subtasks left:		IOT Sprint 1						
Share Google Drive IOT-24	Task	Closed										
Write TP1 Requirements	Task	Closed	Stanislav Širka									
Study SCRUM IOT-33		Closed	Stanislav Širka									
Create Team Chat IOT-23 Update Trello IOT-31		Closed Closed	Stanislav Širka									
Decleration IOT-27		Closed	C.SIIISIGV SIZKO									documentation
Documents		Closed	Stanislav Širka									
Study Poker Cards IOT 24		LIUSEU	DAIIC Apiciniar									
Study Poker Cards IOT-34 Study Story Points IOT-35		Closed	Stanislav Širka									