

## **EXPANDING MEDICAL DEVICES FIRMWARE?**

## DEVELOP IN CONFIDENSE AND STYLE WITH FSI

### UNDERSTANDING THE DOMAIN

Developing software is like a journey: taking a knowledgeable partner with you is crucial to reaching your destination . You need a friend who has been there and done that – and FSI has proven expertise in embedded software development for medical devices.

## FOUNDATION: ARCHITECTURE AND LANGUAGES

AVR

PIC16/18

Python . C . C++ . GCC . Keil . IAR

### EMBEDDED DEVELOPMENT

	AREA	ARMex, CODE, READONLY
		; Name this block of code ARMex
	ENTRY	; Mark first instruction to execute
start		
	MOV	r0, #10 ; Set up parameters
	VOM	r1, #3
	ADD	r0, r0, r1 ; r0 = r0 + r1
stop		New Year
	MOV	r0, #0x18 ; angel_SWIreason_Rep
	LDR	r1, =0x20026 ; ADP_Stopped_Applica
	SVC	#0x123456 ; ARM semihosting (fo
	END	; Mark end of file

OS Linux. Android. FreeRTOS

**PROTOCOLS** USART/UART, I2C, SPI, Ethernet

IoT COAP. MQTT. DTLS

# **Architectures**

- -Real Time
- Motor Control

**ENSURING DELIVERY** THROUGH DUE DILIGENCE IN **PROCESSES** 

The proper development processes ensure that the delivery is timely and meets the highest standards With medical devices, they include among others CFR 21, ISO 9001, HIPAA. We also use proper testing techniques and quality certification per industry – at FSI we ensure quality and compliance.

