IEEE® 802.15.4 Software for the Kinetis MKW2xD Wireless Microcontrollers and the MCR20A 2.4GHz Wireless Transceiver, Version 5.0.5

Release Notes

1 Overview

These release notes pertain to the IEEE® 802.15.4 MAC/PHY software that was developed for the Kinetis MKW2xD wireless microcontrollers and the MCR20A 2.4GHz wireless transceiver, and the associated development boards FRDM-KW24, USB-KW24D512, FRDM-K64F and FRDM-KL46Z. These notes pertain to the MKW41Z IEEE® 802.15.4 Software version 5.0.5.

Contents

2 Release Contents

The Kinetis MK2xD and MCR20A IEEE® 802.15.4 Software version 5.0.5 main wireless connectivity components are listed in the table below.

Table 1. Release Contents

(File | Folder) Name	Description
boards/[board]/wireless_examples/ieee_802_15_4/mac_fsci_black_box	MAC Freescale Serial Connectivity Interface (FSCI) host controlled device (a.k.a. black box)
boards/[board]/wireless_examples/ ieee_802_15_4// msn_*	MyStarNetwork embedded example applications
boards/[board]/wireless_examples/ ieee_802_15_4// otap_*	Over-The-Air-Programming demo application (server and client)
boards/[board]/wireless_examples/ ieee_802_15_4//mwa_*	MyWirelessApp example applications (low power, security, dual-PAN, FSCI host support)
middleware/wireless/ieee_802_15_4_5.0.5/mac	Kinetis IEEE 802.15.4 compliant, multi-instance MAC
middleware/wireless/ieee_802_15_4_5.0.5/phy	IEEE 802.15.4 dual PAN-aware PHY
doc/wireless	Connectivity documentation
middleware/wireless/framework_5.0.5/Common	Connectivity Framework common files
middleware/wireless/framework_5.0.5/FSCI	Freescale Serial Connectivity Interface
middleware/wireless/framework_5.0.5/LowPower	Low Power Module
middleware/wireless/framework_5.0.5/MemManager	Memory Manager
middleware/wireless/framework_5.0.5/Messaging	Messaging API
middleware/wireless/framework_5.0.5/NVM	Non Volatile Memory support
middleware/wireless/framework_5.0.5/OtaSupport	Over-The-Air Programming support files
middleware/wireless/framework_5.0.5/Panic	Panic module
middleware/wireless/framework_5.0.5/RNG	Random Number Generator wrapper
middleware/wireless/framework_5.0.5/SerialManager	Serial Manager for various interface
middleware/wireless/framework_5.0.5/Shell	Shell/Console module
middleware/wireless/framework_5.0.5/TimersManager	Timers Manager module
middleware/wireless/framework_5.0.5/SecLib	Security Library
tools/wireless/MyStarNetwork Demo	MyStarNetwork Demo PC application
tools/wireless/binaries	Demo applications binaries

2.1 List of Pre-compiled Binaries

The *tools/wireless/binaries* folder contains the following pre-compiled binaries:

bootloader_fsci_frdmk64f.bin – FSCI Bootloader for the FRDM-K64F + MCR20A board setup
bootloader_fsci_frdmkl46z.bin – FSCI Bootloader for the FRDM-KL46Z + MCR20A board setup
bootloader_fsci_frdmkw24.bin – FSCI Bootloader for the FRDM-KW24 board

bootloader_otap_frdmk64f.bin – OTAP Bootloader for the FRDM-K64F + MCR20A board setup
bootloader_otap_frdmkl46z.bin – OTAP Bootloader for the FRDM-KL46Z + MCR20A board setup
bootloader_otap_frdmkw24.bin – OTAP Bootloader for the FRDM-KW24 board

sniffer_usbkw24d512.bin – IEEE 802.15.4 sniffer firmware for the USB-KW24D512 board

Please refer to http://www.nxp.com/connectivity for more information on NXP wireless connectivity platforms.

3 What's New and Change Log

This section describes the major changes and new features implemented in the MKW2xD/MCR20A MAC/PHY software releases:

3.1 MKW2xD/MCR20A MAC/PHY Software v5.0.5

- Integration with the Kinetis SDK v2.0
- Kinetis Design Studio with the associated GNU toolchain support

3.2 MKW2xD/MCR20A MAC/PHY Software v5.0.4

- Complete overhaul of the Non-Volatile Memory module
- Kinetis SDK v1.3.0 integration
- FSCI Host application on FRDM-K64F
- FSCI Bootloader for Over-The-Wire firmware updates
- Added KW24D MSD bootloader binaries and source files in the package

4 Software Deployment Considerations

- The IEEE® 802.15.4 applications in this package have been built in a Kinetis SDK version 2.0 environment, making use of the FreeRTOS kernel and microcontroller peripheral drivers included in this SDK. This package includes a full build of the Kinetis SDK v2.0 for Kinetis MKW24D512, MKW21D512, MKW21D256.

- IAR Embedded Workbench for ARM® **v7.80.1** was used to build and test the corresponding IDE projects included in this release.

- Kinetis Design Studio **v3.2.0** with the latest J-Link runtime software installed from www.segger.com was used to build and test the corresponding IDE projects included in this release.

- This package contains the MyStarNetwork PC application used to interact with the corresponding embedded demonstration applications. Please refer *IEEE 802.15.4 MAC Demo Applications User's Guide* and *MyStarNetwork PC Application User's Guide.pdf* for more information**.**

- This release is compatible with the Test Tool for Connectivity Products **v12.6.1** or later. It is recommended to use the *MAC2006.xml* file found in the *tools/wireless/xml_fsci* folder of this package or the Test Tool installation, with the Test Tool Command Console functionality to interact with the FSCI black box applications provided in this package. For more information, please refer *TTUG.pdf* included in the Test Tool installation.

- The *tools\wireless\binaries* folder contains pre-compiled binaries, ready to flash for example applications. It also contains an USB-KW24D512 binary for protocol sniffing functionality which exposes an USB virtual Serial COM. The Microsoft® Windows® driver for the converter can be found at *middleware\wireless\framework_5.0.5\SerialManager\Source\USB_VirtualCom\INF\ nxp_vcom.inf.*

- The package contains a project cloner Windows® executable in the *tools\wireless\project_cloner* folder, which allows copying to a chosen location the example applications files that are likely to be modified by the user, such as IDE projects and configuration headers. It is recommended to use this cloner instead of opening directly the IDE projects from the installation folder, to preserve the original installation files for future use.

5   Embedded System Considerations

- This release contains example applications supporting the following evaluation board setups:
    - o   FRDM-KW24
    - o   USB-KW24D512
    - o   FRDM-K64F + FRDM-CR20A
    - o   FRDM-KL46Z + FRDM-CR20A
- The FRDM supported board feature an embedded OpenSDA debugger chip. For more information, please visit http://www.nxp.com/opensda. Variants of embedded firmware for the OpenSDA chip can be downloaded from the links below.

    — http://developer.mbed.org/handbook/CMSIS-DAP

    — https://www.segger.com/opensda.html

    — http://www.pemicro.com/opensda/

6   Known Limitations

- This release supports only the IAR Embedded Workbench and Kinetis Design Studio (KDS) IDEs and toolchains, the FreeRTOS kernel and a bare-metal non-preemptive task scheduler. Other RTOSes and toolchains supported in the KSDK have not been tested with this release.
- Only the KDS IDE/toolchain is supported on Linux host platforms.
- Maximum file path length in Windows® 7 Operating System: Windows OS 7 imposes a 260-character maximum length for file paths. When installing this package, choose a folder close to the root of the file system to prevent file paths from exceeding the maximum character length specified by Windows OS. The same limitation influences the command line for build tools in various toolchains, which cannot exceed 8191 characters. The recommended installation location is the C:\NXP folder.

- Kinetis KW24D has a two-block 64KB RAM array. Due to architectural constraints, one variable cannot span over the 32KB border of the two blocks and be safely accessed by the code. The GNU/gcc linker is not aware of the respective border, nor does it offer the possibility to reserve the associated memory area and still do automatic link-time placement in the whole RAM. Because of this, when using gcc to build applications, special care must be taken for variables not to span across the 0x1FFF_FFFF - 0x2000_0000 border.

7 Documentation Included in this Package

The following connectivity-supporting documentation is included in this package:

- *IEEE 802.15.4 MACPHY Application Developer's Guide.pdf*
- *IEEE 802.15.4 MAC Demo Applications User's Guide.pdf*
- *IEEE 802.15.4 FSCI Reference Manual.pdf*
- *IEEE 802.15.4 MACPHY API Reference Manual.pdf*
- *Connectivity Framework Reference Manual.pdf*
- *MyStarNetwork PC Application User's Guide.pdf*
- *IEEE 802.15.4 MACPHY Quick Start Guide.pdf*

The package also includes extensive Kinetis SDK v2.0 documentation in the "*docs*" folder.

8 Memory Footprints of MAC Libraries and MAC Layer Applications

8.1 MAC Libraries Memory Footprints

Target Board/Platform: KW24D512				
Component/ Application	**Memory Footprint (bytes)**			**Description**
	READ ONLY CODE	**READ/WRITE**	**READ ONLY DATA**	
Freescale_802.15. 4_MAC_06_M4	18568	13	278	MAC 2006 compiled with non-beacon functionallity
Freescale_802.15. 4_MAC_11_M4	18880	13	289	MAC 2011 compiled with non-beacon functionallity
Freescale_802.15. 4_MAC_06BEGTS _M4	25900	17	284	MAC 2006 compiled with Beacon and GTS functionallity
Freescale_802.15. 4_MAC_06_M0	19912	13	38	MAC 2006 compiled with non-beacon functionallity
Freescale_802.15. 4_MAC_11_M0	20108	13	38	MAC 2011 compiled with non-beacon functionallity
Freescale_802.15. 4_MAC_06BEGTS _M0	28590	17	38	MAC 2006 compiled with Beacon and GTS functionallity

8.2 Application Sizes Using FreeRTOS

Target Board/Platform: FRDM-KW24 (IAR Embedded Workbench)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	65877	884	23172	Default platform configuration
MyStarNetwork Demo Coordinator	55478	794	18579	Default platform configuration
MyStarNetwork Demo EndDevice	54470	830	18600	Default platform configuration
MyWirelessApp Demo Coordinator	53850	798	18535	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	55418	794	19167	Default platform configuration
MyWirelessApp Demo EndDevice	63772	887	20370	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	54306	798	18535	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	54430	794	18567	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	61177	803	18779	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	61529	795	18807	Default platform configuration
Over The Air Programming Demo Server	58806	837	19298	Default platform configuration
Over The Air Programming Demo Client	59261	813	19110	Default platform configuration

Component/ Application	Code Size (bytes)	Data Size (bytes)		Comments
	READ ONLY	READ ONLY	READ/WRITE	
FSCI Application	75204	1060	25612	Default platform configuration
MyStarNetwork Demo Coordinator	64544	1060	21008	Default platform configuration
MyStarNetwork Demo EndDevice	63524	1060	21008	Default platform configuration
MyWirelessApp Demo Coordinator	62620	1060	21008	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	64516	1060	22032	Default platform configuration
MyWirelessApp Demo EndDevice	73340	1060	23052	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	63292	1060	21004	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	63564	1060	21008	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	69960	1060	21520	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	70432	1060	21516	Default platform configuration
Over The Air Programming Demo Server	68368	1060	22028	Default platform configuration
Over The Air Programming Demo Client	68936	1048	21520	Default platform configuration

Table heading above table: **Target Board/Platform: FRDM-KW24 (Kinetis Design Studio)**

Target Board/Platform: USB-KW24D512 (IAR Embedded Workbench)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	73469	1212	24935	Default platform configuration
MyStarNetwork Demo Coordinator	63050	1127	19997	Default platform configuration
MyStarNetwork Demo EndDevice	62042	1165	19970	Default platform configuration
MyWirelessApp Demo Coordinator	61422	1130	19969	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	62990	1126	20833	Default platform configuration
MyWirelessApp Demo EndDevice	68228	1222	21666	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	61878	1130	19969	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	62002	1126	20001	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	68769	1139	20125	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	69105	1132	20209	Default platform configuration
Over The Air Programming Demo Server	64518	1161	20940	Default platform configuration
Over The Air Programming Demo Client	N/A	N/A	N/A	Default platform configuration

Target Board/Platform: USB-KW24D512 (Kinetis Design Studio)				
Component/ Application	Code Size (bytes)	Data Size (bytes)		Comments
	READ ONLY	READ ONLY	READ/WRITE	
FSCI Application	83108	1060	27008	Default platform configuration
MyStarNetwork Demo Coordinator	72448	1060	22404	Default platform configuration
MyStarNetwork Demo EndDevice	71436	1060	22404	Default platform configuration
MyWirelessApp Demo Coordinator	70524	1060	22404	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	72420	1060	22916	Default platform configuration
MyWirelessApp Demo EndDevice	77876	1060	24452	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	71196	1060	22400	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	71468	1060	22404	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	77864	1060	22916	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	78336	1060	22912	Default platform configuration
Over The Air Programming Demo Server	74264	1060	22912	Default platform configuration
Over The Air Programming Demo Client	N/A	N/A	N/A	Default platform configuration

Target Board/Platform: FRDMK64F_MCR20A (IAR Embedded Workbench)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	67163	901	23216	Default platform configuration
MyStarNetwork Demo Coordinator	56760	812	18631	Default platform configuration
MyStarNetwork Demo EndDevice	55752	849	18652	Default platform configuration
MyWirelessApp Demo Coordinator	55124	814	18587	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	56700	812	19219	Default platform configuration
MyWirelessApp Demo EndDevice	65042	905	20422	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	55580	814	18587	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	55696	812	18619	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	62467	819	18831	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	62803	813	18859	Default platform configuration
Over The Air Programming Demo Server	58260	848	19273	Default platform configuration
Over The Air Programming Demo Client	58811	843	19097	Default platform configuration

Component/ Application	Code Size (bytes)	Data Size (bytes)		Comments
	READ ONLY	READ ONLY	READ/WRITE	
FSCI Application	76676	1060	25612	Default platform configuration
MyStarNetwork Demo Coordinator	66028	1060	21008	Default platform configuration
MyStarNetwork Demo EndDevice	65008	1060	21520	Default platform configuration
MyWirelessApp Demo Coordinator	64104	1060	21008	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	65992	1060	22032	Default platform configuration
MyWirelessApp Demo EndDevice	74816	1060	23052	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	64776	1060	21004	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	65040	1060	21008	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	71436	1060	21520	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	71908	1060	21516	Default platform configuration
Over The Air Programming Demo Server	67840	1060	22028	Default platform configuration
Over The Air Programming Demo Client	68608	1064	21520	Default platform configuration

Target Board/Platform: FRDMK64F_MCR20A (Kinetis Design Studio)

Target Board/Platform: FRDMKL46Z_MCR20A (IAR Embedded Workbench)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	70507	787	23018	Default platform configuration
MyStarNetwork Demo Coordinator	58245	803	18425	Default platform configuration
MyStarNetwork Demo EndDevice	56943	1172	18446	Default platform configuration
MyWirelessApp Demo Coordinator	56655	708	18381	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	58159	925	19013	Default platform configuration
MyWirelessApp Demo EndDevice	66357	1600	20192	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	57247	708	18381	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	56995	1140	18413	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	65367	712	18625	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	65303	1172	18653	Default platform configuration
Over The Air Programming Demo Server	60065	740	19075	Default platform configuration
Over The Air Programming Demo Client	59914	1432	18883	Default platform configuration

Component/ Application	Code Size (bytes)	Data Size (bytes)		Comments
	READ ONLY	READ ONLY	READ/WRITE	
FSCI Application	75300	228	24584	Default platform configuration
MyStarNetwork Demo Coordinator	63148	228	19972	Default platform configuration
MyStarNetwork Demo EndDevice	62160	228	19976	Default platform configuration
MyWirelessApp Demo Coordinator	61272	228	19976	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	63176	228	20484	Default platform configuration
MyWirelessApp Demo EndDevice	72164	228	22024	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	61880	228	19972	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	62136	228	19972	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	69840	228	20488	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	70280	228	20488	Default platform configuration
Over The Air Programming Demo Server	65488	228	20484	Default platform configuration
Over The Air Programming Demo Client	65920	216	20488	Default platform configuration

Table title: **Target Board/Platform: FRDMKL46Z_MCR20A (Kinetis Design Studio)**

8.3 Application Sizes Using the bare-metal scheduler

Target Board/Platform: FRDM-KW24 (IAR Embedded Workbench)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	59677	869	10676	Default platform configuration
MyStarNetwork Demo Coordinator	49282	784	6099	Default platform configuration
MyStarNetwork Demo EndDevice	48274	823	6120	Default platform configuration
MyWirelessApp Demo Coordinator	47634	787	6055	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	49202	784	6687	Default platform configuration
MyWirelessApp Demo EndDevice	57680	876	6962	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	48102	788	6055	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	48226	784	6087	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	54969	792	6299	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	55305	785	6327	Default platform configuration
Over The Air Programming Demo Server	52614	826	6814	Default platform configuration
Over The Air Programming Demo Client	53062	808	6618	Default platform configuration

Target Board/Platform: FRDM-KW24 (Kinetis Design Studio)				
Component/ Application	Code Size (bytes)	Data Size (bytes)		Comments
	READ ONLY	READ ONLY	READ/WRITE	
FSCI Application	68472	1060	17328	Default platform configuration
MyStarNetwork Demo Coordinator	57852	1060	12716	Default platform configuration
MyStarNetwork Demo EndDevice	56836	1060	12716	Default platform configuration
MyWirelessApp Demo Coordinator	55932	1060	12716	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	57828	1060	13228	Default platform configuration
MyWirelessApp Demo EndDevice	66712	1060	13744	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	56604	1060	12720	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	56876	1060	12716	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	63272	1060	12716	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	63744	1060	12720	Default platform configuration
Over The Air Programming Demo Server	61616	1060	13232	Default platform configuration
Over The Air Programming Demo Client	62180	1048	13228	Default platform configuration

Target Board/Platform: USB-KW24D512 (IAR Embedded Workbench)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	67141	1204	12191	Default platform configuration
MyStarNetwork Demo Coordinator	56754	1119	7357	Default platform configuration
MyStarNetwork Demo EndDevice	55734	1157	7378	Default platform configuration
MyWirelessApp Demo Coordinator	55106	1122	7313	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	56674	1118	8097	Default platform configuration
MyWirelessApp Demo EndDevice	62004	1209	8178	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	55570	1121	7313	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	55698	1118	7345	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	62445	1127	7901	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	62793	1118	7985	Default platform configuration
Over The Air Programming Demo Server	58222	1153	8000	Default platform configuration
Over The Air Programming Demo Client	N/A	N/A	N/A	Default platform configuration

Target Board/Platform: USB-KW24D512 (Kinetis Design Studio)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	76272	1060	18724	Default platform configuration
MyStarNetwork Demo Coordinator	65652	1060	14112	Default platform configuration
MyStarNetwork Demo EndDevice	64644	1060	14112	Default platform configuration
MyWirelessApp Demo Coordinator	63732	1060	14112	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	65628	1060	14624	Default platform configuration
MyWirelessApp Demo EndDevice	71096	1060	14624	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	64404	1060	14116	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	64676	1060	14112	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	71072	1060	14112	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	71544	1060	14116	Default platform configuration
Over The Air Programming Demo Server	67408	1060	14628	Default platform configuration
Over The Air Programming Demo Client	N/A	N/A	N/A	Default platform configuration

Target Board/Platform: FRDMK64F_MCR20A (IAR Embedded Workbench)				
Component/ Application	Code Size (bytes)	Data Size (bytes)		Comments
	READ ONLY	READ ONLY	READ/WRITE	
FSCI Application	60379	887	10728	Default platform configuration
MyStarNetwork Demo Coordinator	49968	802	6143	Default platform configuration
MyStarNetwork Demo EndDevice	48960	841	6164	Default platform configuration
MyWirelessApp Demo Coordinator	48320	804	6099	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	49904	802	6731	Default platform configuration
MyWirelessApp Demo EndDevice	58370	895	7006	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	48784	804	6099	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	48912	802	6131	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	55675	809	6343	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	56007	803	6371	Default platform configuration
Over The Air Programming Demo Server	51480	837	6789	Default platform configuration
Over The Air Programming Demo Client	52028	836	6613	Default platform configuration

Target Board/Platform: FRDMK64F_MCR20A (Kinesti Design Studio)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	68904	1060	17328	Default platform configuration
MyStarNetwork Demo Coordinator	58292	1060	12716	Default platform configuration
MyStarNetwork Demo EndDevice	57284	1060	12716	Default platform configuration
MyWirelessApp Demo Coordinator	56372	1060	12716	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	58268	1060	13228	Default platform configuration
MyWirelessApp Demo EndDevice	67144	1060	13744	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	57044	1060	12720	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	57316	1060	12716	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	63712	1060	12716	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	64184	1060	13232	Default platform configuration
Over The Air Programming Demo Server	60048	1060	13232	Default platform configuration
Over The Air Programming Demo Client	60812	1064	13228	Default platform configuration

Target Board/Platform: FRDMKL46Z_MCR20A (IAR Embedded Workbench compiler)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	64687	779	10534	Default platform configuration
MyStarNetwork Demo Coordinator	52449	795	5957	Default platform configuration
MyStarNetwork Demo EndDevice	51139	1164	5978	Default platform configuration
MyWirelessApp Demo Coordinator	50859	700	5913	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	52363	917	6545	Default platform configuration
MyWirelessApp Demo EndDevice	60437	1588	6796	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	51443	701	5913	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	51191	1132	5945	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	59563	700	6157	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	59499	1161	6185	Default platform configuration
Over The Air Programming Demo Server	54295	730	6595	Default platform configuration
Over The Air Programming Demo Client	54139	1423	6403	Default platform configuration

Target Board/Platform: FRDMKL46Z_MCR20A (Kinetis Design Studio)				
Component/ Application	**Code Size (bytes)**	**Data Size (bytes)**		**Comments**
	READ ONLY	**READ ONLY**	**READ/WRITE**	
FSCI Application	69232	228	16292	Default platform configuration
MyStarNetwork Demo Coordinator	57168	228	11688	Default platform configuration
MyStarNetwork Demo EndDevice	56184	228	11684	Default platform configuration
MyWirelessApp Demo Coordinator	55304	228	11684	Default platform configuration
MyWirelessApp Demo Coordinator DualPan	57200	228	12200	Default platform configuration
MyWirelessApp Demo EndDevice	65968	228	12196	Default platform configuration
MyWirelessApp Demo Coordinator Security Enabled	55904	228	11688	Default platform configuration
MyWirelessApp Demo EndDevice Security Enabled	56168	228	11688	Default platform configuration
MyWirelessApp Demo Coordinator Beacon Enabled	63872	228	11684	Default platform configuration
MyWirelessApp Demo EndDevice Beacon Enabled	64312	228	11684	Default platform configuration
Over The Air Programming Demo Server	59428	228	12200	Default platform configuration
Over The Air Programming Demo Client	59856	216	12196	Default platform configuration