

User Manual

DA16200 DA16600 SDK Porting Guide

UM-WI-045

Abstract

This document describes changes in SDK structure and IAR projects in DA16200/DA16600 SDK v2.4.0.0 to make porting for the user easier compared to the previous version.

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1 References

- [1] DA16200, EVK User Manual, User Manual, Dialog Semiconductor
- [2] DA16200, Example Application Manual, User Manual, Dialog Semiconductor

2 Introduction

This document describes changes in SDK structure and IAR projects in DA16200/DA16600 SDK v2.4.0.0 to make porting for the user easier compared to the previous version.

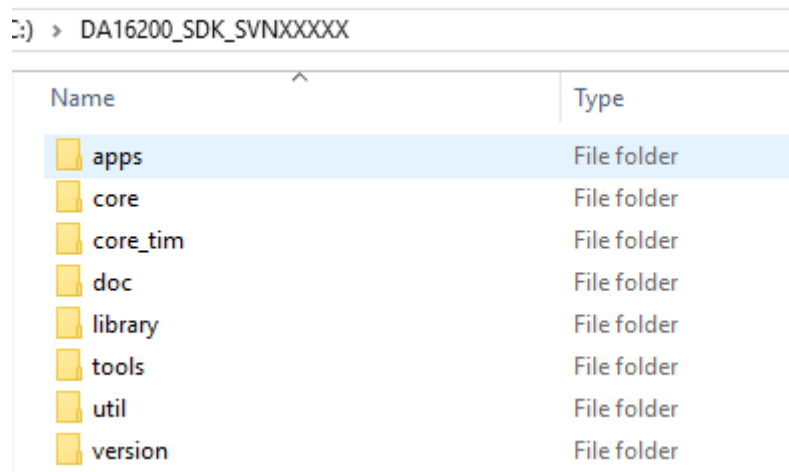
3 SDK Structure

The DA16200/DA16600 SDK v2.4.0.0 has eight folders:

- **apps**: There are three folders under apps folder for each project. The project includes IAR project files, applications and examples for customer.
- **coer**: source codes
- **core_time**: source codes for TIM SDK
- **doc**: user documents (user guides, programmer guides, etc)
- **library**: to which the pre-compiled lib files (.a) are saved
- **tools**: build scripts, temporary build artifacts, or environment files
- **util**: utilities for customer
- **version**: version files to include when Image is created

3.1 Changes in SDK Structure

DA16200/DA16600 Generic SDK v2.4.0.0 adds the new customer folder “apps” for customer code to be developed independently of the SDK core code.



Name	Type
apps	File folder
core	File folder
core_tim	File folder
doc	File folder
library	File folder
tools	File folder
util	File folder
version	File folder

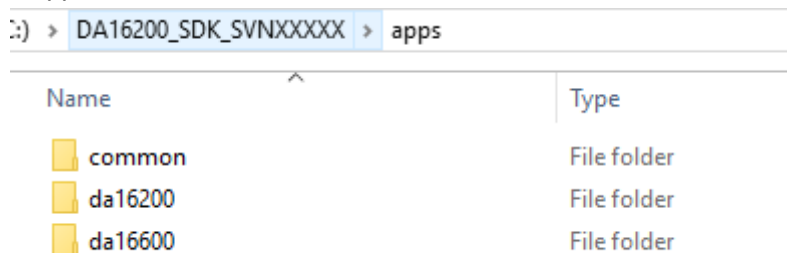
Figure 1: SDK Structure in v2.4.0.0

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3.2 Customer Folder

The user application codes of v2.4.0.0 are combined in a new customer folder that is composed of three sub-folders:

- **common**: common applications like examples
- **da16200**: user applications for DA16200
- **da16600**: user applications for DA16600



Path: DA16200_SDK_SVNXXXXX > apps

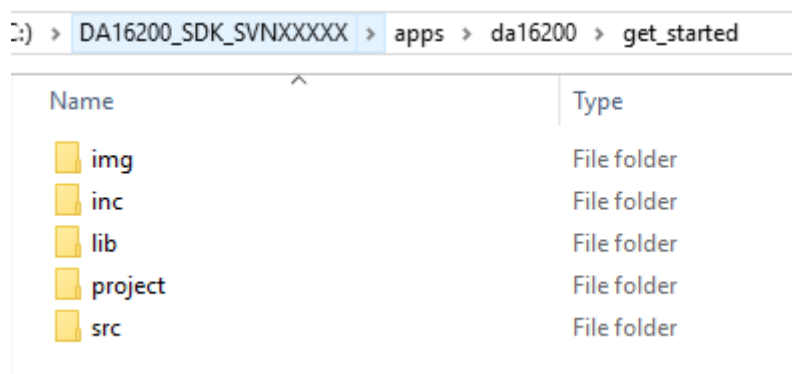
Name	Type
common	File folder
da16200	File folder
da16600	File folder

Figure 2: New Customer Folder in v2.4.0.0

3.3 User Application Codes

The user application codes of v2.4.0.0 are distributed in five folders.

- **img**: DA16200 Images
- **inc**: header files for user application
- **lib**: library files (.a)
- **project**: project files to build SDK
- **src**: source files for user application



Path: DA16200_SDK_SVNXXXXX > apps > da16200 > get_started

Name	Type
img	File folder
inc	File folder
lib	File folder
project	File folder
src	File folder

Figure 3: User Application Code in v2.4.0.0

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The user application codes of v2.4.0.0 are combined in \apps\da16200\get_started\src folder.

⋮) > DA16200_SDK_SVNXXXXX > apps > da16200 > get_started > src

Name	Type
app_apmode_reset.c	C Source
app_provisioning_sample.c	C Source
app_tls_provision.c	C Source
hello_world.c	C Source
system_start.c	C Source
user_apps.c	C Source
user_atcmd.c	C Source
user_command.c	C Source
user_dpm.c	C Source
user_gpio_handle.c	C Source
user_http_client.c	C Source
user_http_server.c	C Source
user_nvram_cmd_table.c	C Source
user_system_feature.c	C Source
user_uart.c	C Source

Figure 4: User Application Code in v2.4.0.0

4 IAR Project

4.1 IAR Workspace File

The IAR IDE workspace file in v2.4.0.0 is \apps\da16200\get_started\project\DA16xxx.eww.

⋮) > DA16200_SDK_SVNXXXXX > apps > da16200 > get_started > project

Name	Type
asic	File folder
Release	File folder
main.ewd	EWD File
atcmd.ewp	EWP File
coap.ewp	EWP File
common_host.ewp	EWP File
customer_app.ewp	EWP File
http.ewp	EWP File
iperf.ewp	EWP File
main.ewp	EWP File
mqtt_client.ewp	EWP File
ota.ewp	EWP File
ramcrypto.ewp	EWP File
slib_tim.ewp	EWP File
sys_common.ewp	EWP File
DA16xxx.eww	IAR IDE Workspace

Figure 5: IAR IDE Workspace File in v2.4.0.0

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4.2 IAR Project Structure

The DA16200/DA16600 SDK v2.4.0.0 has 11 projects:

- **common_host**: Host interface initialize functions project
- **sys_common**: system common project
- **atcmd**: AT commands project
- **http**: HTTP client and server project
- **ota**: Over the air firmware update project
- **mqtt**: MQTT subscriber and publisher project
- **coap**: CoAP client and server project
- **iperf**: NetX/NetX Duo IPerf project
- **slib_tim**: PTIM project
- **customer_app**: customer application project
- **main**: main project

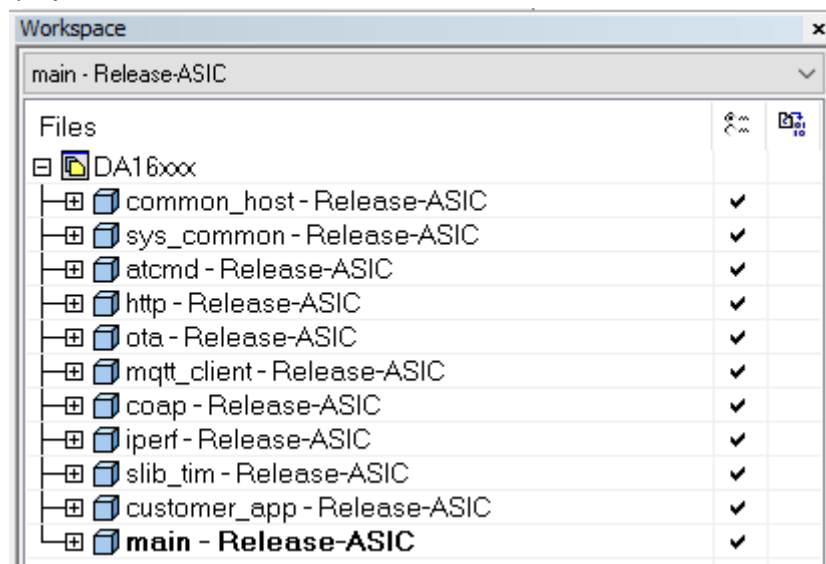


Figure 6: IAR Project Structure in v2.4.0.0

Revision History

Revision	Date	Description
1.2	28-Mar-2022	Update logo, disclaimer, copyright.
1.1	24-Aug-2021	Change path and folder name for V2.4.0.0 SDK
1.0	30-Mar-2020	First Release

DA16200 DA16600 SDK Porting Guide**Status Definitions**

Status	Definition
DRAFT	The content of this document is under review and subject to formal approval, which may result in modifications or additions.
APPROVED or unmarked	The content of this document has been approved for publication.

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Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu

Koto-ku, Tokyo 135-0061, Japan

www.renesas.com

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