















ANALYSIS CHALLENGES

Dense code

- No strings
- No symbols
- No debug statements/printf-like functions
- No external libraries

SUBWAY

| Function name | Start | ^ |
|---|----------|---|
|  sub_100 | 00000100 | |
|  sub_1E0 | 000001E0 | |
|  sub_228 | 00000228 | |
|  sub_32C | 0000032C | |
|  sub_344 | 00000344 | |
|  sub_384 | 00000384 | |
|  sub_3C4 | 000003C4 | |
|  sub_3E0 | 000003E0 | |
|  sub_3F4 | 000003F4 | |
|  sub_418 | 00000418 | |
|  sub_4D0 | 000004D0 | |

| Strings | | Hex View-1 | | | |
|---|----------|------------|----------------------------------|--|--|
| Address | Length | Type | String | | |
|  ROM:00002... | 00000006 | C | \nI\vJ\vK | | |
|  ROM:00007... | 00000020 | C | SigEd25519 no Ed25519 collisions | | |
|  | | | | | |
| Line 1 of 2 | | | | | |

LET THE HW GUIDE YOU

Datasheet Provides Addresses

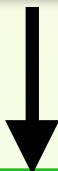
IDA Segments

- Create manually/IDAPython
- SVD Loader (Edit>Plugins>SVD File Management)
 - SDK_10.0.12.146.1/config/embsys/Dialog_Semiconductor/DA1469x-00.xml

```
<?xml version="1.0" encoding="ascii"?>
<!-- File naming: Dialog_DA1469x.svd -->
<!--
  Copyright (C) 2019-2021 Dialog Semiconductor.
  This computer program includes Confidential, Proprietary Information
  of Dialog Semiconductor. All Rights Reserved.

  Generated by cmsis-svd (version 0.2), d.d. August 26, 2021 - 08:12:40
-->
<device xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" schemaVersion="1.3" xs:noNamespaceSchemaLocation="CMSIS-SVD.xsd">
  <vendor>Dialog</vendor>          <!-- device vendor name -->
  <vendorID>ARM</vendorID>         <!-- device vendor short name -->
  <name>DA1469x</name>             <!-- name of part-->
  <series>DA1469x</series>        <!-- device series the device belongs to -->
  <version>1.2</version>          <!-- version of this description, adding CMSIS-SVD 1.1 tags -->
  <description>690</description>
  <licenseText><!-- this license text will appear in header file. \n forces line breaks -->
```

| Resource | Start Address | End Address | Size (kB) |
|-----------|---------------|-------------|-----------|
| WDOG | 50000700 | 50000800 | 0,25 |
| Reserved | | | |
| XTAL32M_C | 50010000 | 50010200 | 0,5 |
| TIMER | 50010200 | 50010300 | 0,25 |
| TIMER2 | 50010300 | 50010400 | 0,25 |
| MAC_TIM | 50010400 | 50010500 | 0,25 |
| Reserved | | | |
| UART | 50020000 | 50020100 | 0,25 |
| UAR2 | 50020100 | 50020200 | 0,25 |
| UART3 | 50020200 | 50020300 | 0,25 |
| SPI | 50020300 | 50020400 | 0,25 |
| SPI2 | 50020400 | 50020500 | 0,25 |



Import SVD file

Import and apply register information from an SVD file

☒ Open local file

☐ load from a Github repository

File

9x-00.svd

...

Repository

https://github.com/cmsis-svd/cmsis-svd-data/tree/main/data

File name

Cancel

OK

| Segments | |
|----------|----------|
| Name | Start |
| SYS_WDOG | 50000700 |
| CRG_XTAL | 50010000 |
| TIMER | 50010200 |
| TIMER2 | 50010300 |
| UART | 50020000 |
| UART2 | 50020100 |
| UART3 | 50020200 |
| SPI | 50020300 |
| SPI2 | 50020400 |
| I2C | 50020600 |
| I2C2 | 50020700 |