

Keil uVision 5 Setup

Tuesday, May 11, 2021 11:05 AM

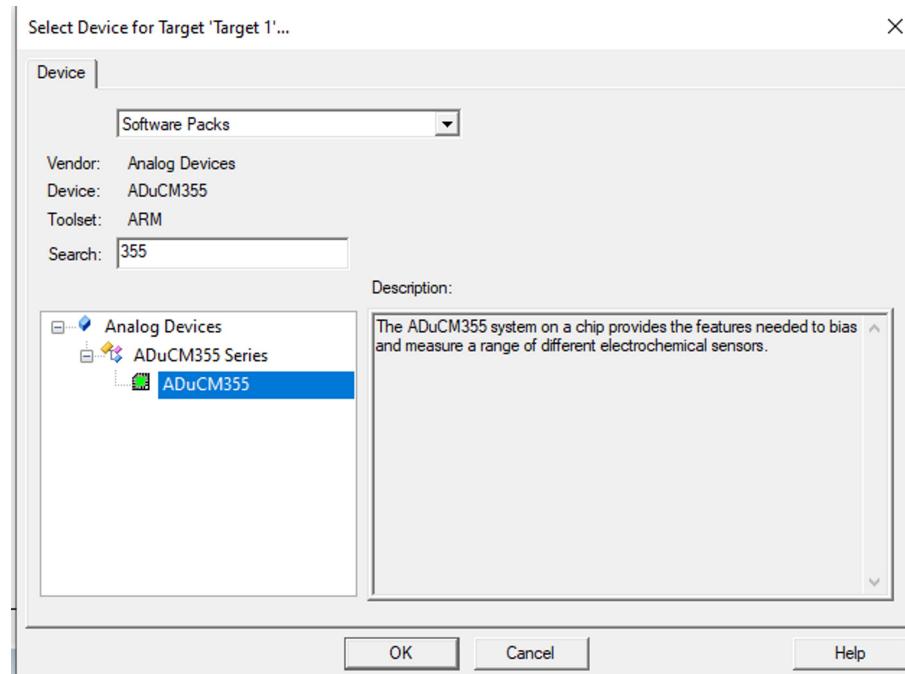
How to make a Keil project for 355 from scratch.

the project only have a few files:

AD5940Main.c	4/14/2021 4:11 PM
main.c	5/11/2021 11:36 AM
SqrWaveVoltammetry.c	4/12/2021 5:02 PM
SqrWaveVoltammetry.h	4/12/2021 5:02 PM
Temperature.c	4/9/2021 12:24 PM
Temperature.h	4/9/2021 12:24 PM

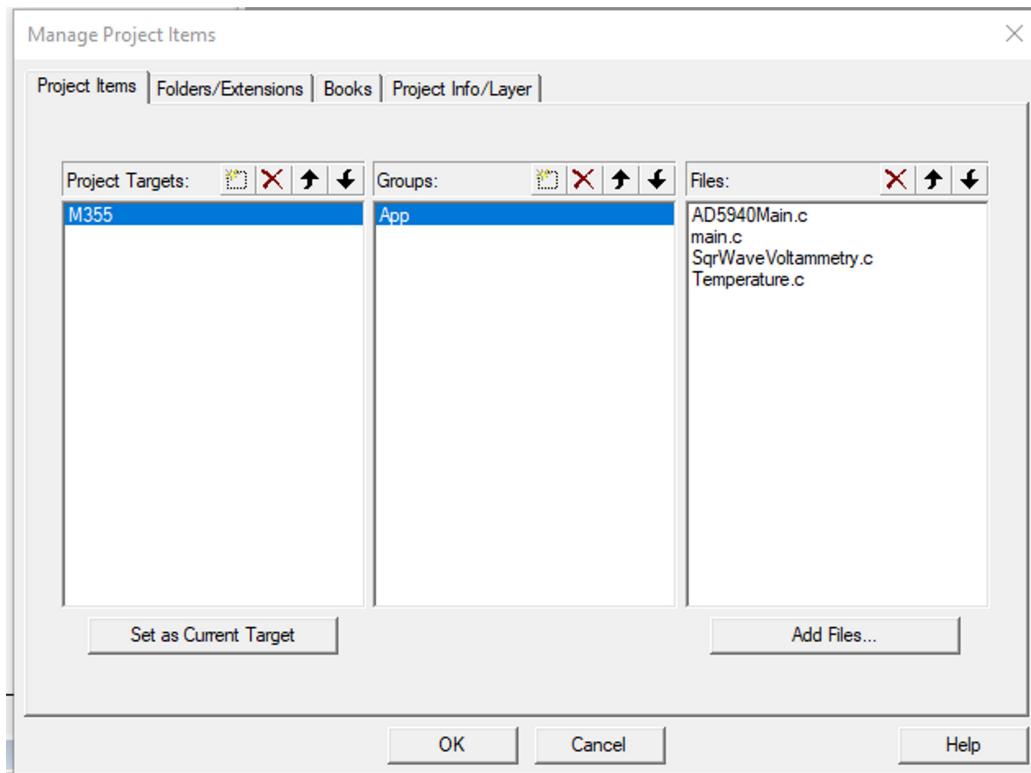
the header files for Temperature.c and SqrWaveVoltammetry.c should also be included.

Open keil,
Project -> New uVision Project
Select project location , type in name.



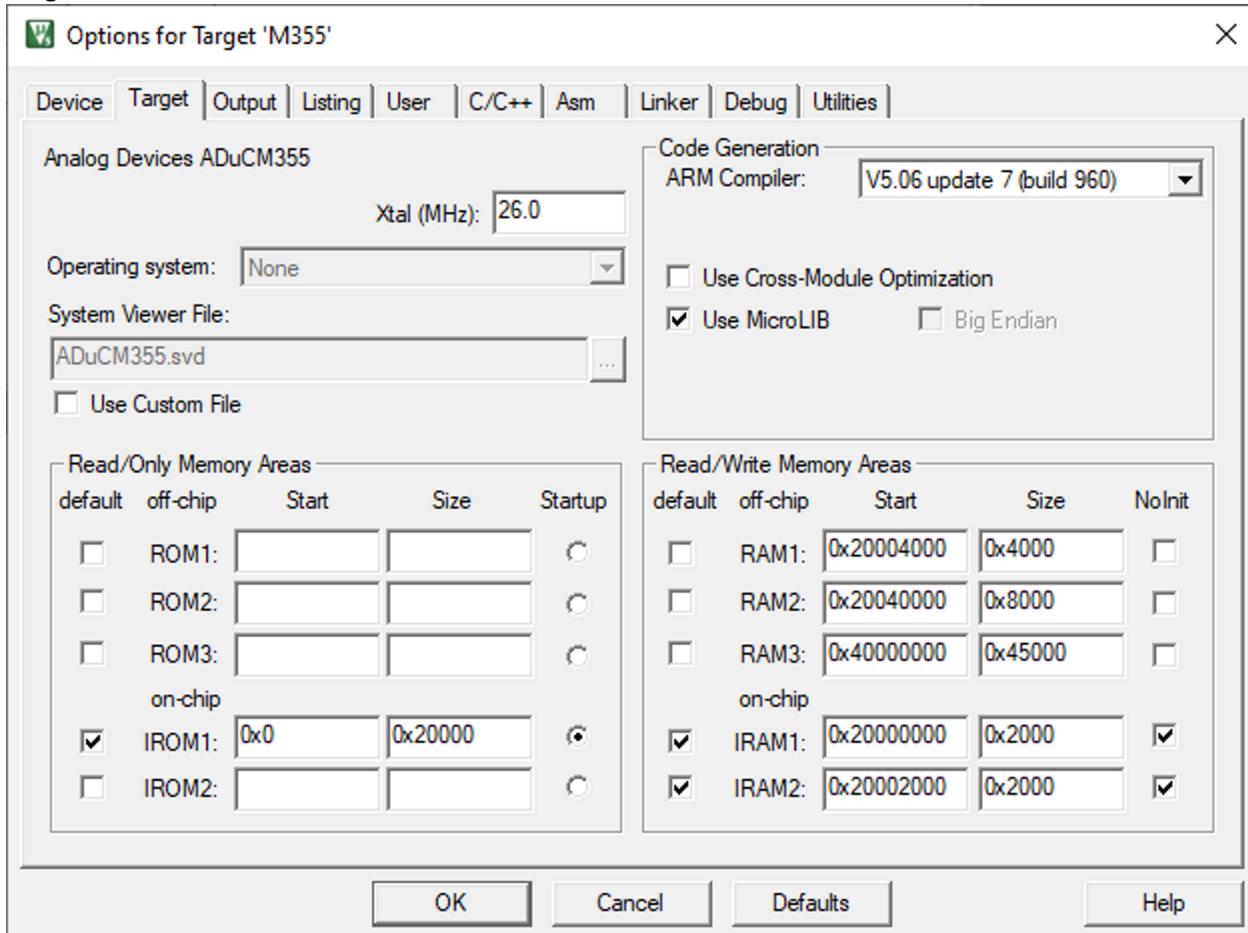
Then go to Project -> Manage -> Project Items

Then create Project Target, Group, and Add the c files.

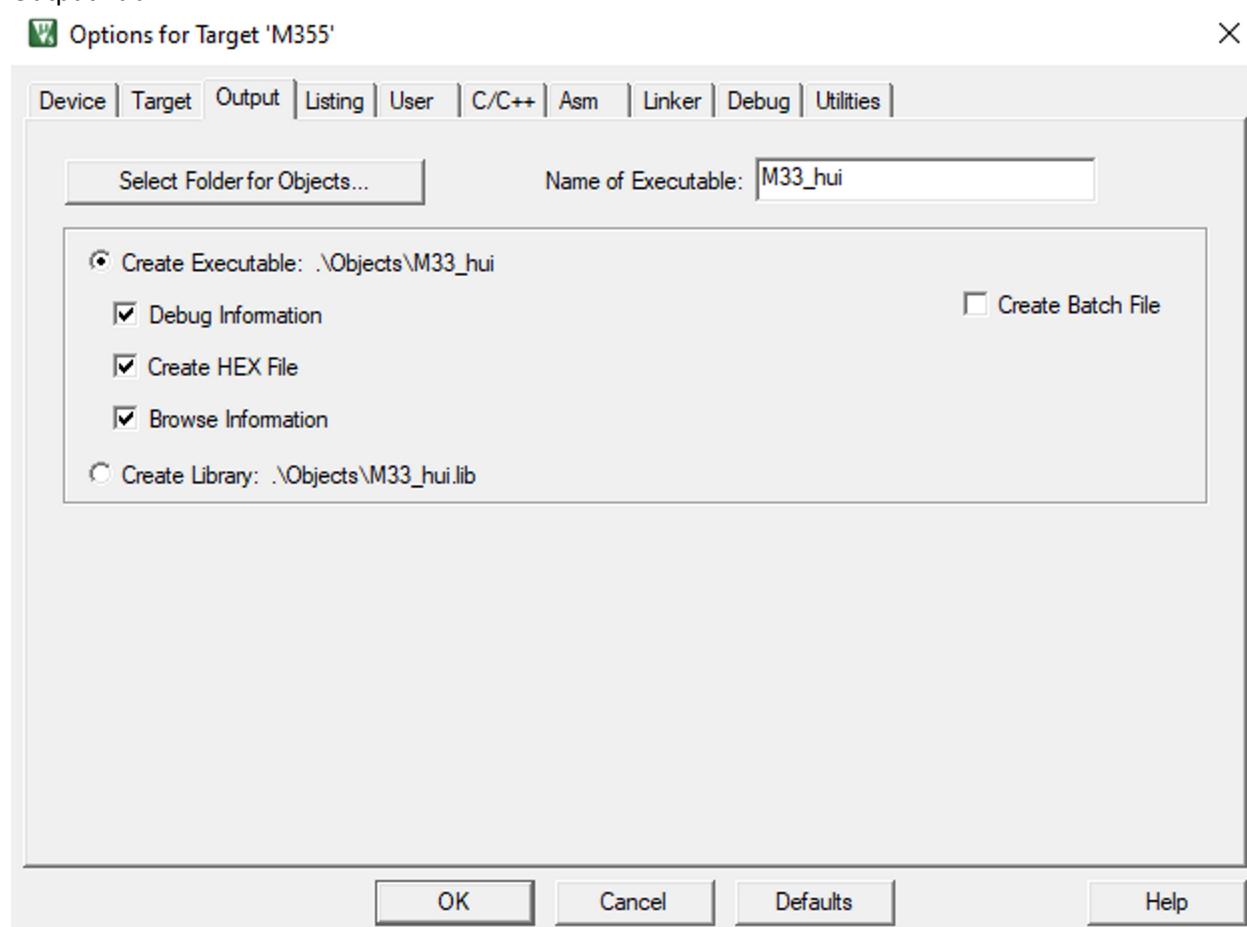


Then go to Project -> Options for target M355

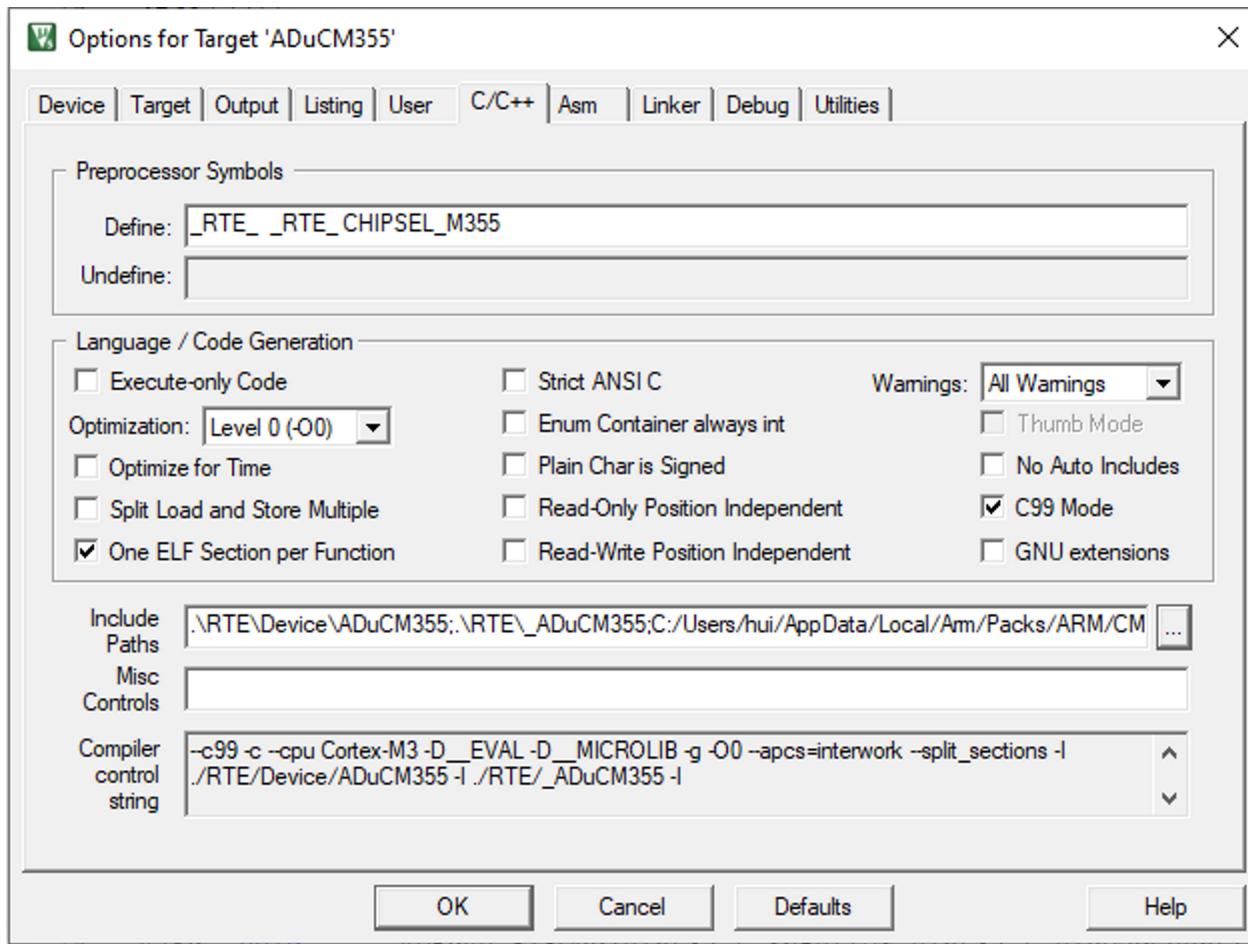
Target Tab:



Output Tab:



C/C++ Tab:

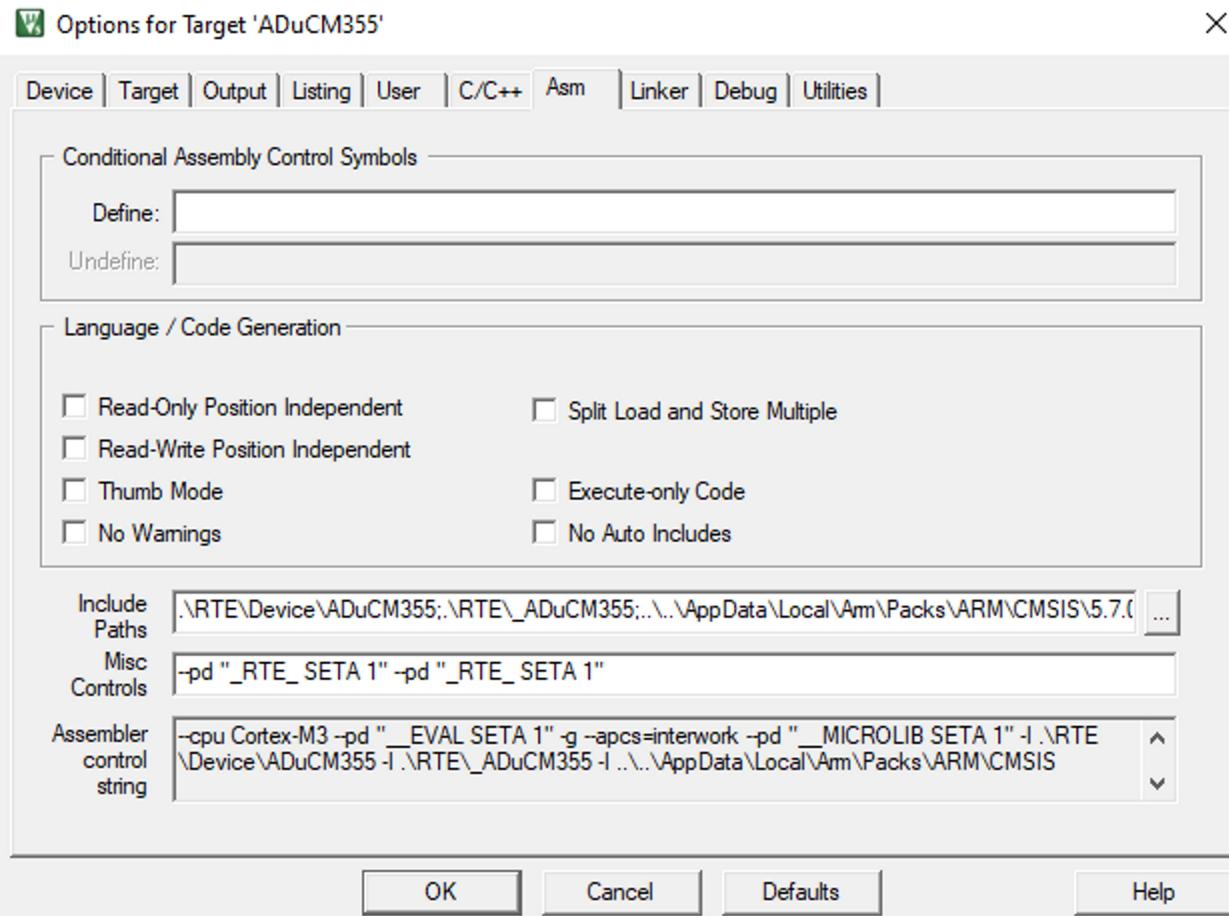


Define: _RTE_ _RTE_CHIPSEL_M355

include Path:

```
.\RTE\Device\ADuCM355;
.\RTE\_ADuCM355;
C:/Users/hui/AppData/Local/Arm/Packs/ARM/CMSIS/5.7.0/CMSIS/Core/Include;
C:/Users/hui/AppData/Local/Arm/Packs/AnalogDevices/ADuCM355_DFP/1.0.3/ADuCM355/common;
C:/Users/hui/AppData/Local/Arm/Packs/AnalogDevices/ADuCM355
_DFP/1.0.3/ADuCM355/common/ad5940lib;
C:/Users/hui/AppData/Local/Arm/Packs/AnalogDevices/ADuCM355_DFP/1.0.3/ADuCM355/inc;
C:/Users/hui/AppData/Local/Arm/Packs/MDK-Packs/cJSON/1.0.0
```

Asm Tab:

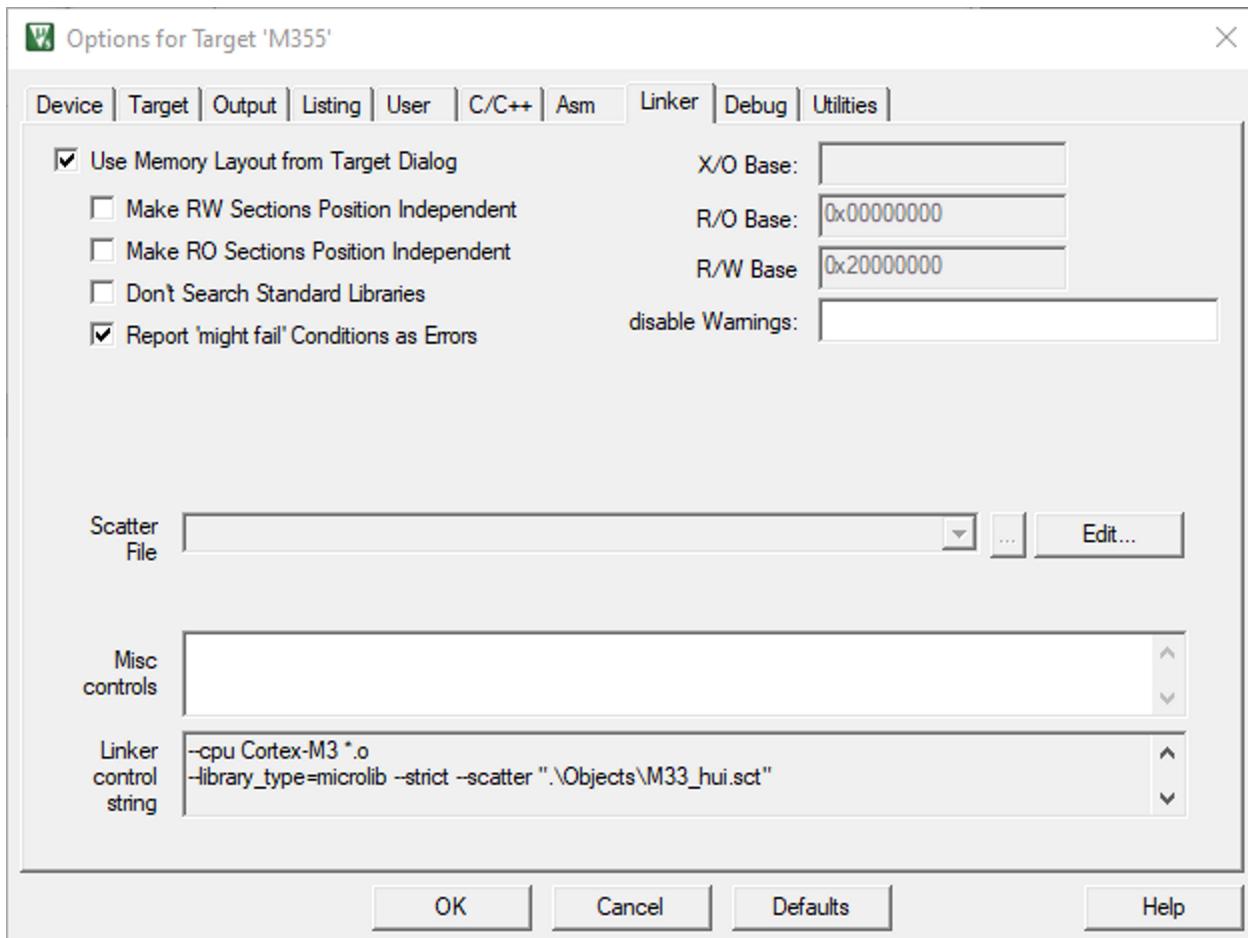


Include Path:

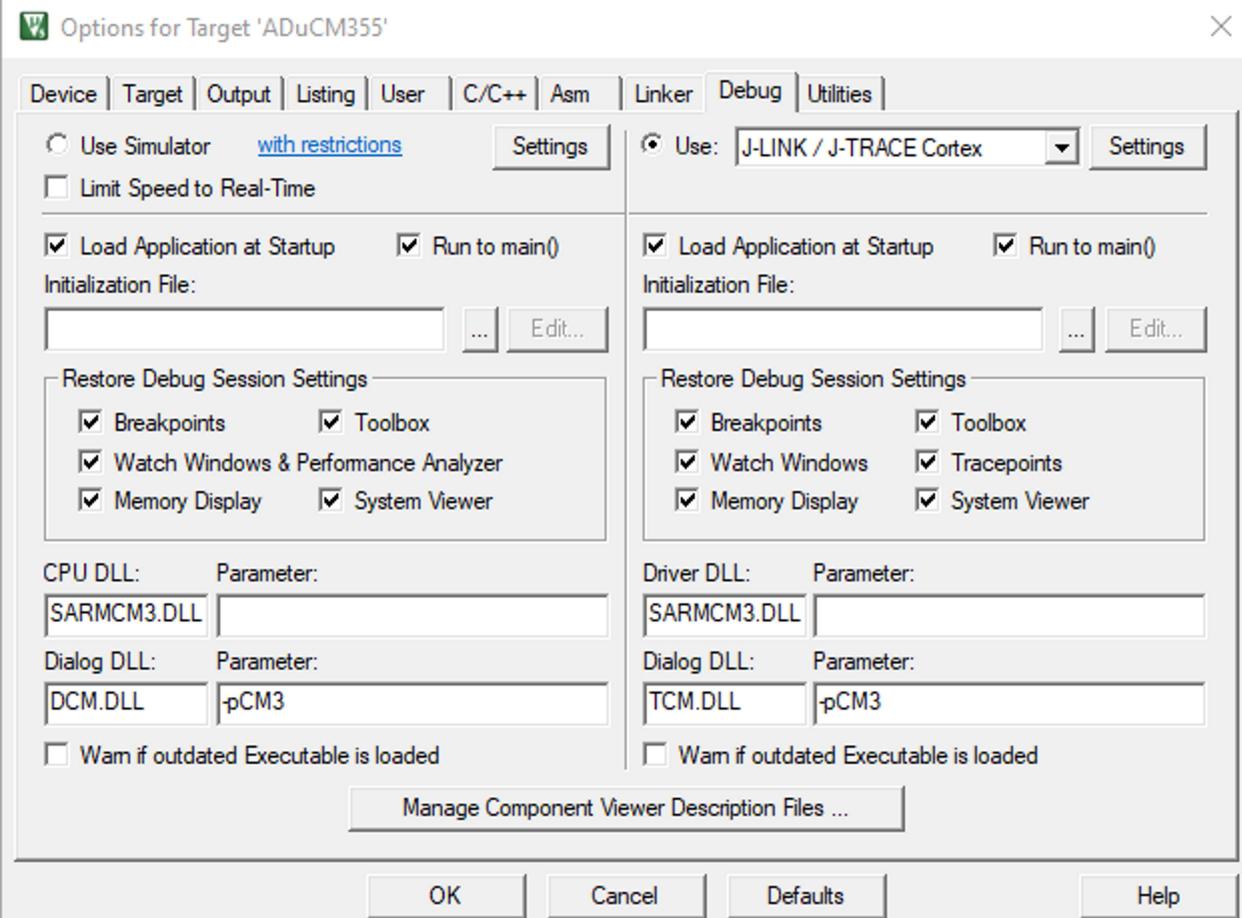
.\RTE\Device\ADuCM355;
.\RTE_ADuCM355;
..\AppData\Local\Arm\Packs\ARM\CMSIS\5.7.0\CMSIS\Core\Include;
..\AppData\Local\Arm\Packs\AnalogDevices\ADuCM355_DFP\1.0.3\ADuCM355\common;
..\AppData\Local\Arm\Packs\AnalogDevices\ADuCM355_DFP\1.0.3\ADuCM355\common\ad5940lib;
..\AppData\Local\Arm\Packs\AnalogDevices\ADuCM355_DFP\1.0.3\ADuCM355\inc;
..\AppData\Local\Arm\Packs\MDK-Packs\cJSON\1.0.0

Misc Control: --pd "_RTE_SETA 1" --pd "_RTE_SETA 1"

Linker:



Debug Tab:



Cortex JLink/JTrace Target Driver Setup

X

[Debug](#) [Trace](#) [Flash Download](#)

J-Link / J-Trace Adapter

SN:

Device:

HW : dll :

FW :

Port: Max Clock:

SW Device

Error	Move
No J-Link found	Up
	Down

Automatic Detection ID CODE:
 Manual Configuration Device Name:

IR len:

Connect & Reset Options

Connect: Reset: Reset after Connect

Cache Options

Cache Code
 Cache Memory

Download Options

Verify Code Download
 Download to Flash

Interface

 USB TCP/IP

State: ready

TCP/IP

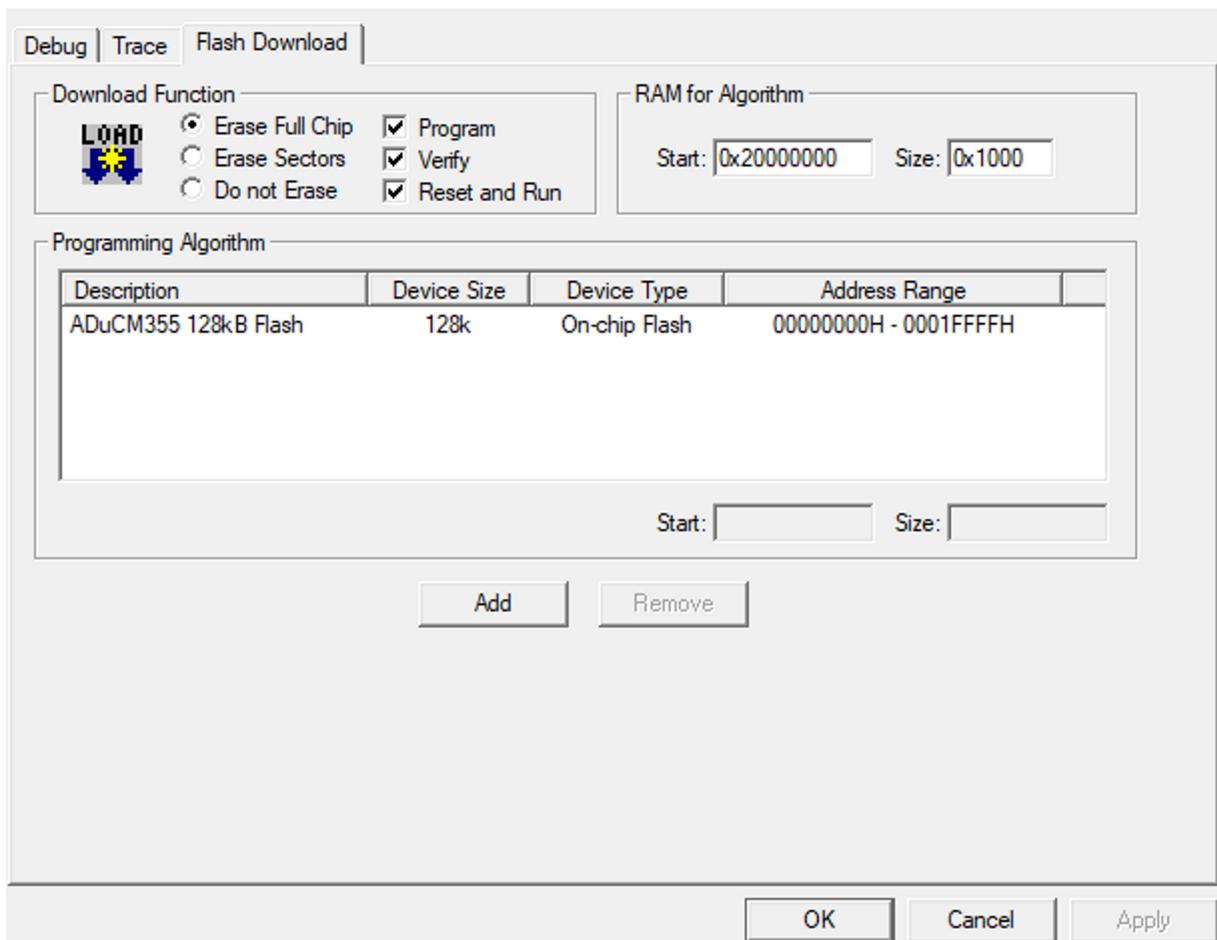
Network Settings

IP-Address Port (Auto: 0)

Misc

Cortex JLink/JTrace Target Driver Setup

X



Then set up runtime environment

Go to Project -> Manage -> Run Time Environment

Manage Run-Time Environment

Software Component	Sel.	Variant	Version	Description
CMSIS				Cortex Microcontroller Software Interface Components
CORE	<input checked="" type="checkbox"/>		5.4.0	CMSIS-CORE for Cortex-M, SC000, SC300, ARMv8-M, ARMv8.1-M
DSP	<input type="checkbox"/>	Source	1.8.0	CMSIS-DSP Library for Cortex-M, SC000, and SC300
NN Lib	<input type="checkbox"/>		1.3.0	CMSIS-NN Neural Network Library
RTOS (API)	<input type="checkbox"/>		1.0.0	CMSIS-RTOS API for Cortex-M, SC000, and SC300
RTOS2 (API)	<input type="checkbox"/>		2.1.3	CMSIS-RTOS API for Cortex-M, SC000, and SC300
CMSIS Driver				Unified Device Drivers compliant to CMSIS-Driver Specifications
Compiler		ARM Compiler	1.6.0	Compiler Extensions for ARM Compiler 5 and ARM Compiler 6
Data Exchange				Data exchange or data formatter
JSON				JSON Software Components
cJSON	<input checked="" type="checkbox"/>		1.7.7	cJSON
Device				Startup, System Setup
Retarget UART	<input checked="" type="checkbox"/>		0.9.4	Retarget standard library I/O to UART
Startup	<input checked="" type="checkbox"/>		0.9.4	System Startup for ADuCM355
AFE				
Operation	<input checked="" type="checkbox"/>		0.9.4	AFE low level library for ADuCM355
Peripheral Libraries				
CLOCK	<input checked="" type="checkbox"/>		0.9.4	Clock low level library for ADuCM355
CRC	<input type="checkbox"/>		0.9.4	CRC low level library for ADuCM355
DMA	<input type="checkbox"/>		0.9.4	DMA low level library for ADuCM355
FLASH	<input type="checkbox"/>		0.9.4	Flash controller low level library for ADuCM355
GPIO	<input checked="" type="checkbox"/>		0.9.4	GPIO low level library for ADuCM355
I2C	<input type="checkbox"/>		0.9.4	I2C interface low level library for ADuCM355
INT	<input checked="" type="checkbox"/>		0.9.4	External interrupt library for ADuCM355
PWR	<input type="checkbox"/>		0.9.4	Power Management low level library for ADuCM355
RST	<input checked="" type="checkbox"/>		0.9.4	Reset low level library for ADuCM355
RTC	<input type="checkbox"/>		0.9.4	RTC low level library for ADuCM355
SPI	<input type="checkbox"/>		0.9.4	SPI interface low level library for ADuCM355
Timer	<input type="checkbox"/>		0.9.4	General Purpose Timer low level library for ADuCM355
UART	<input checked="" type="checkbox"/>		0.9.4	UART low level library for ADuCM355
Watchdog	<input type="checkbox"/>		0.9.4	Watchdog low level library for ADuCM355
File System		MDK-Plus	6.13.8	File Access on various storage devices
Graphics		MDK-Plus	6.10.8	User Interface on graphical LCD displays
Network		MDK-Plus	7.14.0	IPv4 Networking using Ethernet or Serial protocols
USB		MDK-Plus	6.14.1	USB Communication with various device classes

Then you can
Project -> build to build binaries.

