

**HY16F Series** 

# **IDE Software Instruction Manual**

(AndeSightV3.x)



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## 1. IDE Software Introduction

HY16F IDE(Integrated Development Environment) software developmental instrument has adopted AndeSight RDS as its version, which has integrated and developed an environment for the new generation in Andes Technology. It supports the latest 32 Bit CPU core (N801&E801), which suffices the requirements for MCU clients to develop rapidly. AndeSight IDE Software adopts the interface developed by Andes Technology. The software is based on Eclipse IDE combining external member and module of GCC GNU CComplier and GDB Debugger. Many firmware programmers are already accustomed to develop program through IDE software. For them, it becomes extremely difficult to use GCC compiler and GDB debugger by Command Line approach only. However, AndeSight IDE possesses a strong and lucid graphical operation interface, which is easy to get started and for further concentrated on product development.

# 2. IDE System Requirement

Minimum system disposition required by operating AndeSight RDS IDE:

- (1) PC/NB Hardware Requirement
- (1.1) X86 System CPU Compatible to IBM PC
- (1.2) 4 GB DDR Memory
- (1.3) 8 GB HD Hard Disk Drive Capacity
- (2) Supporting Product Model:
- (2.1) HY16F391x Series (HY16F3910/HY16F3913)
- (3) Hardware Supporting Model:

(3.1) HY16F3910 Series Developmental instrument, HY16F3910-DK0**x** series Development

- (4) Software Supporting Version:
- (4.1) AndeSightV3.2.1RDS version
- (4.2) HYCON 32-bit MCU DeviceV0.29
- (5) Operation System Requirement:

Win XP (32-Bit), Win 7 (32/64-Bit), Win 8 (32/64-Bit), Win10 (32/64-Bit).



### 3. IDE Software Installation

#### 3.1. Software Installation

Include major programs of AndeSight RDS and HYCON HY16F patches. Please install **AndeSightV3.2.xRDS** in the compact disk first. Upon installation completion, please install additional **HYCON 32 bit MCU DeviceV0.xx.exe** program, so as to increase settings in HYCON HY16F developmental environment. Users are asked to execute through following the installation steps.

Regarding to access authority in Windows 7 Operating System above, administrator visit permission is required before computer software can be installed.

#### 3.2. HY16F Series IDE Installation

Execute Setup.exe executable file. Just click next step, click ok and choose an installation path until installation is completed.

諸閱讀以下授權合約,您必須接	受合約的各項條款才能繼續安裝。
HYCON 32-bit MCU IDE (AndeSight	tRDS)程式最終用戶使用條款
紘康科技股份有限公司(以下簡稱 (AndeSight RDS)程式最終用戶使 ( <u>http://www.hycontek.com/</u> ,以下 (AndeSight RDS)」(以下簡稱「	爯「本公司」) 徐依據HYCON 32-bit MCU IDE 用條款(以下簡稱本使用條款)於HYCON網站 簡稱「本站」)提供「HYCON 32-bit MCU IDE 軟體」) 乙下載服務。
壹丶軟體內容 「軟體」	整合開發環境,適用於本公司所開發之32-
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ON Technology Corporation -	下一步(N) > 取;
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ON Technology Corporation — CON 32-bit MCU IDE (AndeSi 在繼續安裝之前請閱讀以下重要)	<u>下一步(N)</u> 取 ight RDS, Official) 版本 3 ー □ 資訊 ●
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W Technology Corporation     Note: Before installing the executive j     software first strongly! Because     antivirus software will delete or     installation fail or cut off. Version Revision Record V3.2.1 RDS Official (2020.12.0 '. Minimum system requirement	下一步(N) > 取 ight RDS, Official) 版本 3 ー 資訊。 -步]。 program, proposed closing anti-virus e in the course of installing, some forbid the materials installed, make the 



#### 3.3. HY16F Series Device Installation

After installing **AndeSightV3.2.xRDS** related software, install HYCON HY16F main program (HYCON 32-bit MCU DeviceV0.xx.exe).

**Note:** The installation paths of the two must be the same. The following figure shows the installation of HYCON 32-bit MCU DeviceV0.29.



#### 4. IDE Software Registration

Execute AdeSight.exe under AndeSight\_RDS\_v32**x** Official on the desktop or the start program and it should be noted that some of the above operating systems Windows 7, due to a permissions problem when executed in a computer software, you need administrator access permissions to normal execution.

#### 4.1. Software Opening

XA: This is the opening screen for IDE software.



※B: This is the storage path selection for all projects. Users are free to make personal decisions. (Default Path: C:\Users\xxx\AndeSight3\workspace.)

A Workspace Launcher		×
Select a workspace		
AndeSight RDS Version stores your projects in a folder called a workspace. Choose a workspace folder to use for this session.		
Workspace: C:\Users\Robert.Wang\AndeSight3\workspace	~	Browse
Use this as the default and do not ask again	ОК	Cancel



#### 4.2. Software Registration

Find out the registration document HCN190115b24fb00753000209.lic in the installation path. Ex (install AndeSightV3.2.1RDS): Install software in the default path C:, the registration document in C:\Andestech\AndeSight\_RDS\_v321\license Find out License file and copy the registration document name, only need to copy serial number HCN190115b24fb00753000209. Open up AndeSight RDS software and find out Preferences under Windows. Follow the below registration steps to finish the software registration.

A C/C++ AndeSight RDS \	Version [HYCON]						
File Edit Navigate Search	h Run Project Wind	ow Help					
I 🕂 📬 🖌 🖓 🗸 🖓 🗸	1 · · · · · · · ·	Open Perspective	•				
Project Explorer %		Show View	•				
		Preferences					
A Preferences							– 🗆 X
type filter text	Deploy						⇔ • ⇔ •
> General	Serial: 2	HCN190115b24fb0	0753000209				
> C/C++	License file:	C\Andestech\Ande	Sight RDS v32	1\license\HCN19011	15b24fb00753000209 li		Browse
> Chip Profile Settings		1					
Gcov	Deploy Activation File.	<b>_</b>					3
> Install/Update	( ·	4)					
Language							
> LdSaG							
Deploy 1							
> Remote Development							
> Remote Systems							
> Target Management Def							
TCF Agent Configurations							
> Team							
> Terminal VEP Editor							
						$\bigcirc$	
< >						<b>U</b>	
?						ОК	Cancel

- (1) Click License, select Deploy
- (2) Input Serial: HCN190115b24fb00753000209
- (3) Search for File of license through Browse

C:\Andestech\AndeSight\_RDS\_v321\license\ HCN190115b24fb00753000209.lic

(4) Click Deploy Activation File to execute software certification (please make sure to enforce).

License			×
Product License Type License Limit License Issuer Expiration Dat Redistributor	: AndeSight_RDS v3.2.0 : Activation File : Andes Technology e: Unlimited : HYCON		ANDES
		ОК	Cancel

(5) Click OK for confirmation.

Don't need to register every time open the software after finishing the registration.



# 5. HY16F Mini Link Driver Connection

After software installation, HY16F Mini Link can be connected, USB drive program in AICE is required to be installed in this moment.

Ex (install AndeSightV3.2.1RDS) drive program is to be installed in:

C:\Andestech\AndeSight\_RDS\_v321\ice\libusb-AICE-driver

#### 5.1. HY16F Mini Link Driver Installation Instructions

- ※01 : As illustrated below, administrator is required to be installed in PC, so as to see the drive success in this item.
- X02 : Path for installation can be selected, AICE drive program.
- X03 : Click next step until installation is completed.





### 5.2. Connection HY16F Mini Link and target board Development Tools description

Step1: EDM Wire connects to HY16F Mini Link and Target Board. Step2: PC 's USB Port connect to Mini Link USB connector.

Target in chart below is HY16F3910-DK01 product connection illustration. Different products have different connection locations.





#### 6. IDE Project Setting

#### 6.1. Newly Established Project (In HY16F3910 project as an example)

Step1: Click Andes Project Creator.

Step2: Double click HY16F3910.

Step3: Denominate the Project Name: LED.

Step4: Select HY16F3910\_Style.

Step5: Click Finish after confirmation.

Step6: Select HY16F3910 in the Target and righ click to connect HY16F3910.





#### 6.2. Old File Opening

Step1: Select File.

Step2: Click Import.

Step3: Select Existing Projects into Workspace.

Step4: Click Browse.

Step5: Choose the old file you want to open below Workspace Folder. Click Okay upon confirmation.

Step6: Click Finish to complete old project opening.





#### 6.3. Program Writing

Step1: Select Project and double click main.c.

Step2: User can write the C programing language or assembly language under main.c screen.

Step3: Chip connection can be selected, right click to select Connect Target via AICE.

In addition, the following can be chosen.

- (1) From Problem next to Console, user can decide whether there are wrongful messages.
- (2) Include file is able to add file .h here.
- (3) C programs other than main.c can be put in src folder, such as Display.c.





#### 6.4. Program Compiling

Step1: Select illustration Build All. The same can be selected under Project.

Step2: Problems can be selected to see if there are wrongful messages.

Step3: By observing Console, users can confirm that Flash usage amount is text=1988

bytes and SRAM usage amount is data=16 bytes.





#### 6.5. Chip Burning

Step1: Select output under Debug before choosing

HY16F3910\_ADC\_APP-202104291743-0xab31.bin.

- Step2: Select .bin and click on the right button before clicking Flash Burner.
- Step3: Default burner has been set. Don't move unless necessary.
- Step4: Click Burn to conduct immediate burning.
- Step5: By observing Logging screen, users can see if the burning were successful and grasp the total burning time.

🗑 🖾 * 🖾 🚳   🤌 * : 🛊 : 💷 * : 🎝 🖉 🖓 🖉	8 8 1 0 1 8 1 A 1 A		A Flash Programming Wizard – 🗆 🗙
Project Explorer 🛛	E 😤 🤊	· · · · · · · · · · · · · · · · · · ·	r Electing Diver
HY16F3910_ADC			Trasing Diver
> 🔆 Binaries		2	2 Program flash memory of the target.
> 🔊 Includes		2	Sten3
🗸 🗁 Debug		2	Flash Driver
V 🗁 output		3	Location: BurnMainPage
e output Step1			We have the second
> Is disasm.s		3	Violispace The system Valables
III HY16F3910_ADC_APP-202104291743-	-Uxan31 bio		Flash Image
HV1652010 ADC 202104201742	21		Location: Children Robert Warehand AndeSight?) works and WV1652010 ADC Debugh outputh WV1652010 ADC ADD-202104201742-0vab21 bin
and alf tot	Open	F3	3
symbol tot	Open With		Workspace File System Variables
> Project	Show in Local Terminal		Programming Start Address: 0x90000
> 1 HY16F3910 ADC.adx - [Andes/le]			
makefile	📔 Сору	Ctrl+C	C Driver Arguments
bjects.mk	Paste	Ctrl+V	V Target board:  V Flash Controller Address:
b sources.mk	X Delete	Delete	
> 🔁 Include	Paste As Link		Unice Cock Atter Programming Trease and in
🔁 output	hdanan		Verification Erase All
V 📴 Project	move		Misc Arguments:
🗁 output	Rename	F2	2
> C Display.c	import		Logging
> 🖻 main.c	Na Export		now burn sectors address 0x00000 ^
> 🗁 src			Done
👜 cleanup.bat	Refresh	FS	3 Vari fuine
B WISSING ADC adv	Make Targets		size is 0x708 bytes.
B WISSION ADCINICAL Ston	Electric Connect	CHLC.	Get CRC 033DBF50.
	Riash burner	Cuit	Verify success.
makefile.defa	Run As		Delete the image copy C:\Users\Robert.Wang\.burning
D makefile targets	Debug As		
	Profile As		exitValue: 0
	Compare With		Sten5
Target Manager : Local Targets 😫 🛛 🔡 Outline	Peoplese With		RESETHOID takes 92 ms.
> Bunning Target	Replace With		
88 HY16F3910 ICE-ICE: 9904	Customize Popup Menu		Erase takes 9 ms.
- 浄 Targets	Properties	Alt+Enter	r Prog takes 19 ms.
HY16F184		For	Verify takes 9 ms.
HY16F187			Write Cillears Debart Wang) burning to WIACH totally takes 162 mg
HY16F188		Tel	*1 write C:(Users/Robert.wang).burning to FLASH totally takes 162 ms.
HV16F196		TCL	2L <
HY16F196B		And	ad
HY10F19/		The	16
HI HYTOFI9/B		JTA	IA .
B HM4551002		The	
D WY1651088		ICE	Sten4
		her	Close Close



HY16F Series Programming Area Description:

- 1. App Bin File: This programmed code is generated by the user application program, programmed in the chip's App Flash ROM area, this code is necessary during the programming.
- 2. Data Bin File: This programmed code is generated by the user own fixed parameters or calibration parameters, programmed in the chip's Data Flash ROM area, this code is no necessary, depending on the actual needs of customers.
- 3. App Bin and Data Bin is separated by the BIN File, the purpose is to do the application of partition programming, if you do not need to do partition programming, you can directly use the BIN file to replace the App Bin file.





#### 6.6. Debug Mode

Set default stopping point under Debug mode.

Step1: Click the droplist before choosing Debug Configuration.

Step2: Select MCU Program(YELLOW BUG).

**Note:** Please don't select Application Program(RED BUG), select RED BUG to make debug error.



Step3: Select Debugger.

- Step4: Select GDB Setup, input GDB Lnit File: gdb.init
- Step5: Select Startup
- Step6: Put a tick by Reset and Hold, Put a tick by Resume. Set 80000 and main in "3. Runtime Options".
- Step7: Click Apply and Debug to enter the debug mode.

A C/C++ - HV16F3910_ADC/Project/main.c - AndeSight RDS Version	¢.*		
File Edit Source Refactor Navigate Search Project Run Window Help	ine 🛙		
🖪 🗂 🕶 🔛 🕼 🔨 🐨 🔠 📠 🕫 🎭 🎭 🎭 🏘 🗰 🕇 🖸 🕶 🚱 🖛 🖉 🕶 🖉	rug Configurations		×
Project Explorer S Step1 * 1 HY16F3910_ADC Create	, manage, and run configurations		
V 😂 HY16F3910_ADC Debug As		Stop2	300- I
> 🐇 Binaries Debug Configurations		Sleps	2
>   Includes  Organize Favorites	X 🖻 🐎 🔹	Name: HY16F3910_ADC	
bype fil	Iter text	🔝 Main 🔅 Debugger 🍉 Startup 😴 Tracer 🦉 Source 🗔 🕻	Common 廢 Exception Handling
	Application Program	Debugger Options	
v 🕞 Project SICP2	THY16F3910_ADC	GD8 Setup Remote Target	
😂 output	Multi-Core Application Program Multi-Core MCU Program	GDB Setup	
> 这 Display.c	Target Monitor	Do not read .gdbinit file when launching GDB. (nx)	
> Ig main.c		GDB Command:	
log cleanup.bat		S(gdb)	Browse Vanables
👔 gdb.init		outs init rise	Brours: Variabler
HY16F3910_ADC.adx		agovini	violitie. Vinuolee
HY16F3910_ADC.launch		Ston/	
makefile defs		Jiep+	
C makefile.targets			1
		Name: HY16F3910_ADC	
		Main % Debugge > Startup Tracer % Source	Common B Exception Handling
		Reset and Hold Step5	
		set \$ir0=0x40708	A
			×
		2. Binary File Options	
Eltar m	atched 6 of 7 items	Load binary file	
	atched o of Fitchia	Use file:	Workspace File System
0		Offset (hes):	
andes	ATCE-MINT VI.0.1	3. Runtime Options	
Those	``Console ີ ເລົ້າ Properti	Set program counter at (hex): 80000	Step6
📕 Target Manager : Local Targets 🕱 🛛 🔡 Outline) 💦 👔 🚱 🖼 🚱 🤝 🕫 🗉	ICE-ICE Connection Console [H	Set breakpoint at: main	•
✓ <sup>™</sup> Running Target	Andes ICEman v4.5.3 (C	Resume	
8 HV16F3910 ICE-ICE: 9904	Licensed under GNU GPI	4. GDB Run Commands	
✓ ♣ Targets			^
B HY16F184	For bug reports, read		
HY16F188	Telpet port: 9901		
HV16F196	TCL port: 6666		Step7
HY16F196B	Andes AICE-MINI v1.0.1		
HY16F197	There is 1 core in tar		Revert Apply
B HV16F198	hardware reset-and-hol		
HY16F1983	The core \$0 listens or		Debug Close
HY16F198B	ICEman is ready to use-		
> 🐚 HV16F3910	nardware reset-and-hold	succ	

**Note:** If user had selected RED BUG to make debug error. Suggest to delete Debug file. And then, re-build project and re-create Debug Configuration, please follow above Step1~7 in detail.



#### 6.7. Function List

- Step1: Double click the Main program. For example, by double clicking the 24th row, a blue breakpoint can be developed.
- Step2: Regarding to selection ABCDEFGH in the Debug mode: A (Software Resetting) / B (Free Run) / C (Pause) / D (Exit) / E (Step Into) / F (Step Over) / G (Jump Out) / H (Assembly Language can be single executed.) (Only the C Programing Language can be single executed after cancellation.)

# ABCDEFG H

Step3: Observe assembly language instruction.

Step4: Ensure that the chip is presented in Debug mode, with a stop sign being displayed.

Step5: SRAM can be observed in the memory screen.

Step6: All IP Register Screens.

Step7: From variable screen, variables in C language can be observed.

🗛 Debug - LED1/Project/main.c - AndeSight RDS Version				
<u>File Sea</u> rch <u>R</u> un <u>W</u> indow <u>H</u> elp				
恭••••	Ste	ep5		11 🕸 🔁
🏇 Debug 🔀 📟 Memory Map 🛋 Modules Step2 🗖 🗖	🕵 Expressions 📋 Mem	ory 🖂		№ 🔛 🔄 👪 • 🗸 '
🧃 🗣 🕪 💷 🔳 🔁 😥 🖄 📝	Monitors 🚽 💥	🙀 0x00000 : I	0x0 <traditionals b="" now="" p<="" s2="" th=""><th>anderings</th></traditionals>	anderings
K LED1 Debug [(DSF) MCU Program] A B C D E F G H      Thread [0] (Suspended : Breakpoint)     memory at main.c.24 0x90400     gtb-4		0x00000 mory Monitor 0x00000 0x00000 0x00000	D000         111394A6         CA3C6E5           0008         C12C02C7         60B1499           0010         084E94AD         1BC351F           0018         44C25011         2F4C2D1           0020         84110120         847A134	0 ¦n<Ê 2 Ç.,Á.I±` 4N.ôQĂ. 2 .PÂDL/ 5ℓ.z.
🖻 main.c 💥 🗖		0x0000	0028 CB260023 7684349	<b>⊈.6Ë.4.</b> v
Sten1	Step6			
	SoC Registers 23 19	Registers		🔲   1010 1010 🗞 🗸 I
DrvGPIO SetPortBits(E PT2, i++); //:	Name	Value		Decemination
24 Delay(0x8000); //)	T AND CAG	A 9706	Address	System Perioter
if(i>0x0f)i=0x00; //				and System Register
26 }	E M CLK			the Clock System Reg
27 return 0;	표 👬 PMU			n Power Manageme
28 }				and Memory Controlls
	표 👬 PIO1			👬 Port I/O1 Control
Ston?	🖃 👬 PIO2			👬 Port I/O2 Control
	iiii PIO2_1	0xf	100 0x40810	PT2PUM/PT2PU/PT2
Enter location here 💉 🐑 🏠 🔄 📑 💅 🏹	lill PIO2_2	0x2	1999 Ox40814	PT2IEM/PT2IE/PT2C
♦ 00090400: movi \$r0.#32768	1919 PIO2_3	0x0	1919 0x40818	-/-//PT2DI
00090404: jal 0x90420 <delav></delav>	<u>&lt;</u>			] [
25 if(i>0x0f)i=0x00;	Name : PIO2_2			
00000408• 1wi \$r0 [\$fn±#_8]	Hex:Ox2			
📮 Console 🚛 Target Manager : Local Targets 💥 😰 😜 🔁	© <sub>☉</sub> Breakpoints 🕪= Varia	ables 🖂	🖾 📑	🕞 🛃 📑 🗗 🖓
E Running Target	Name	Туд	pe 1	Value
HY16F1 AICE: 9901	(×)= i	unsi	gned int O	x3
Step4				
⊕ the HY16F1 ⊕ ∰ Generic Targets			S	tep7
	<			



#### 6.8. Offline Function

Step1: After confirming the correctness in Debug mode, click exit button to leave. Under this moment, chip will exit debug mode.

Step2: Debug mode and compiling mode can be switched.

Project 23 - D	🐉 Debug 🕄 💦 🐘 🛛 🔳 🗱 🔁 😥 👘 🔝 👘 🔅 💎	Constant State Constant State S	🖄 🕫 🖻 💠 💥 🐒 🖆 📑 😁
		Expression         Type           SPL_TET         SPL_NOCDws           SPL_TEAD_01         SPL_TEAD_01           SPL_TEAD_01         SPL_TEAD_01           SPL_TEAD_01         SPL_TEAD_01           SPL_TEAD_01         SPL_TEAD_01	Value Step2
output	maine 1	SPLIESI2     Add new expression	
> C Display.c > C main.c > C main.c = cleanup.bat = gdb.init = HY16F3910_ADC.ac	<pre>7 void ToitalADC(void); 7 void ToitalADC(void); 7 void Delag(unisigned int mum); 7  7 / void Delag(unisigned int mum); 7  7 / void min Tommin */ 7 / void min Tommin */ 7 / void min Tommin */ 7  7 / void min Tommin */ 7 / void mi</pre>		
HY16F3910_ADC.lai	00 (	SoC Registers Amony Map	約46百回 백만 백 전 모 대
T 23 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<pre>b Directory Reads Highs (E THIRDEL.200) // Disket Hims Directory Reads Highs (E THIRDEL.200) // Disket Hims Directory Relations() // ENCO-10.100 Clock/1 selic directact(MAD 2000) Directory Relations() // ENCO-10.100 Clock/2 (HCT Clock/2 His statul setting) templayInt(); LipplayInt(); Clock/2 Highs (); Directory Relations(); Highs (); Directory Relations(); Highs (); Directory Relations(); Directory Relations(); Dire</pre>	Name         Value           > Mil All Registers	Description
Targets	95 Delay(10000); 96 InitalADC();		
<ul> <li>HY16F184</li> <li>HY16F187</li> <li>HY16F188</li> <li>HY16F196</li> </ul>	<pre>9 HOTOTATUSALEs_Dyse = 0; 975_BaskledII(4,0x0D); //Enable OIE(0lobel Interrupt) 9</pre>	v v	
HY16F1968 HY16F197 HY16F197B	🕲 Console 🛛 🔪 [Problems] 🛄 Properties] 🥪 Terminal ( GLOB Command ) 🔤 Disassembly     HY16F3910,ADC (MCU Program) HY16F3910,ADC.adx   🗧 🕱 🐐 🔒 🔐 🖗 🖉 🖉 🛃 🔹	Breakpoints 23 A Modules	, ₩%#®@X ⊞⊟\$;***
<ul> <li>HY10F198</li> <li>HY16F1983</li> <li>HY16F1988</li> <li>HY16F3910</li> <li>HY16F3913</li> <li>HY16F3981</li> </ul>			

# 7. IDE Software Uninstalling

Enter "Add/Remove Windows Component" in the control console to remove the programs below.

To remove HYCON 32-bit MCU DeviceV0.xx, please select

HYCON\_32-bit\_MCU\_DeviceV0.xx.

To remove AndeSight installation program, please select

AndeSight\_RDS\_v32**x** before choosing program removal.



### 8. Q&A

#### 8.1. How to close Win10 digital signature

#### Error Message Record

Building and debugging is OK in Windows 8 64-bit, but there is an issue in the installation, that is, we use lib usb (an open source USB driver) for ICE man, but it is not signed for Windows 8. Before users install AndeSight, they need to disable this check by the following steps:

PS: The above message means that when installing AndeShape AICE driver might be failed, you need to manually close the digital signature and then perform driver installation again.

Solution Approach (In Win10 as an example):

Step1: Press the lower left corner of the desktop Start menu	, Select '	"Settings"	option.
(refer to the figure)		-	





Step2: Click "Update & security" option.

股定					-	×
<u>ت</u>	設定			3	找設定	9
	_	<b></b>		0	$\circ$	
			$\oplus$	E C	X	
	<b>系统</b> 顯示、通知、應用程	<b>装置</b> 藍牙、印表機、滑鼠	網路和網際網路 Wi-Fi、預航模式、VPN	個人化	<b>帳戶</b> 您的帳戶、同步設定、	
	式、電源				工作、其他使用者	
	ß	d .	0	$\square$		
	A字	$\bigcirc$		$\overline{\mathbf{U}}$		
	時間與語言 語音、地區、日期	<b>輕鬆存取</b> 朗讀程式、放大鏡、高	<b>陽私權</b> 位置、相機	更新與安全性 Windows Update、復		
		對比		原、備份		

Step3:

- 1. First click on the left of the "Recovery" option.
- 2. Then click to the right of the "Restart now" button.

	← 股差			-	×
	② 更新與安全性		尊找設定		ρ
	Windows Update	重設此電腦			
	Windows Defender	如果您的電腦沒有正常運作,重股電腦可能會有所幫助,這可讓您 選擇保留您的檔案或移除檔案,然後重新安裝 Windows。			
	備份	開始重設			
1.	観原				
	啟用	進階啟動			
	適用於開發人員	從裝置成光碟 (例如 USB 提碟機成 DVD) 飲動,變更 Windows 飲動 設定,或從系統決像還原 Windows + 這樣會重新飲動您的電腦 +			
	2	立即重新叙题			



Step4: Select "Troubleshoot" option.



Step5: Select "Advanced options" option.



Step6: Select the "Startup Settings" option.





Step 7: Press the "Restart" button.



Step 8: After the restart, then press the "F7", it means to disable drivers forced signature, then it will enter the desktop, users can refer to the past approaches to update or install Driver.

啟動設定
按下數字以選擇下面的選項:
使用數字最或功能錄 F1-F9。
1) 啟用偵錯
2) 啟用開機記錄
3) 啟用低解析度視訊
4) 啟用安全模式
5) 啟用安全模式 (含網路功能)
6) 啟用安全模式 (含命令提示字元)
7) 停用驅動程式強制簽章
8) 停用開機初期啟動的反惡意程式碼保護
9) 停用失敗時自動重新啟動
按下 F10 檢視其他邂項
按下 Enter 以返回作業系統



Solution Approach (In Win8 as an example):

- Step1: Press [Win]+[I] to display the setting interface.
- Step2: Select Change PC settings in the lower right corner.
- Step3: For Win8.0 → Select General → Advanced startup → Restart now For Win8.1 → Select Update & recovery → Recovery → Advanced startup → Restart now
- Step4: Select Troubleshoot → Advanced options → Startup Settings → Restart.
- Step5: After the restart, then press the "F7", it means to disable drivers forced signature.
- Step6: Enter the desktop, users can refer to the past approaches to update or install Driver.
- P.S: 1. Reset again, it will restore digital signature.2. Win8.0 and Win8.1 have slightly different ways of closing the digital signature, the main difference is in Step3.

#### 8.2. How to update AndeShape AICE method

Solve AndeShape AICE driver was not installed successfully:



- 1. Disable digital signature to install the driver.
- 2. In AndeShape AICE icon (right click selected content, as shown below).



• Update AndeShape AICE steps as follows:



Driver paths are as follows:
 C:\Andestech\AndeSight\_RDS\_v321\ice\libusb-AICE-driver

#### 8.3. Target can't connect

If Reset and Hold instruction is not set normally, chip cannot be connected. In this case, please refer to the "debug mode" in chapter 6.6 for setting. Additional remarks: User can check HW pin connection (RST/VDD3V/ECK/EDIO/VSS) or click "Connect Target Via AICE" to check RST pin status. In normal case, RST pin have high/low status change. If RST pin keep low always, maybe the HY16F Mini Link was broken. Please contact with HYCON staff.



#### 8.4. AndeSightRDSV3.2.x installation notes

Please be noted when install AndesightRDSV3.2.x in the win7(64 bit), win8(64 bit), win10(64 bit) system. Installing AndesightRDSV3.2.x might be failed, provide some information for user reference below.

- 1. Closed the Anti-virus software.
- 2. Modify the setup property, select windows compatibility mode as"XP SP3 + administrator". Please refer to the picture below.
- 3. Remove the old version Andesight.

◆ setup 雇性
<ul> <li>◆ setup <u>属性</u></li> <li>×</li> <li>×</li> <li>※</li> <li>※</li></ul>
1973年32

#### 8.5. License registration issue (first time installation)

Please refer to chapter 4.2 in detail. It only occurs on the first time to open Andes environment.

#### 8.6. WARNING : Couldn't compute FAST\_CWD pointer message(Compiler warning)

As title, it occurs the warning message "Couldn't compute FAST\_CWD pointer" in Win10 with AndesightRDSV3.2.x. User can ignore the message. It is warning message only, it don't effect the product development and chip performance.



#### 8.7. Enter Debug Mode abnormal and select RED BUG issue

Enter Debug mode, the correct selection is YELLOW BUG. Because HYCON HY16F don't support release mode (Application Program), If select RED BUG and enter release mode (refer to the below pictures). User have to delete Debug file and re-build project and re-create Debug Configurations, the Debug Configurations setting in detail. Please refer to the chapter 6.6.

0 - 9   🐁 🛷 - 🔟	👔 🔤 👳 🗢 🖛	🌼 - O - 9a - 🗞 🛷 -	
(no launch history)	Þ	(no launch history)	10
Run As >	X 1 Application Program	Debug As	> 💥 1 Application Program
Run Configurations Organize Favorites		Debug Configurations Organize Favorites	2 MCU Program

# **RED BUG, selection ERROR**

#### 8.8. Antivirus software to effect the build code speed

The antivirus software "360 safeguard" may lead to compiler speed lower (over 1 minutes). To finish the build project only takes 3~10 seconds in normal condition. Close or modify the antivirus software setting, that is the reference solution. To solve the compiler speed lower issue.

#### 8.9. AndeSight IDE software cannot be opened and executed normally

When the AndeSight IDE software cannot be opened and executed normally, pop-up an error message. Refer to the picture below.

AndeSight	×
An error has occurred. See the log file C:\Users\Robert.Wang\.andesight\ast3.2.1_rds\configurati	on\1594350947506.log.

In this case, please go to the Andes installation path of the computer and delete the .andesight folder. Refer to the picture below.

→ Windows (C:) → 使用者 → Robert.Wang			
名稱 ^	修改日期	類型	
📙 .andesight	2020/7/10 上午 11:38	檔案資料夾	
android .	2020/2/17 上午 10:40	檔案資料夾	
AndroidStudio3.5	2020/2/17 上午 09:57	檔案資料夾	
dnx	2019/7/31 上午 11:18	檔案資料夾	
dotnet	2020/2/13 上午 09:54	檔室咨料本	

# 8.10. Deleting the Debug folder in the AndeSight IDE software, and Build project will generate an error message Error 1

Some users have a habit of deleting the Debug folder in the project directory before re-Build Project. Refer to the picture below.



When re-Build Project will generate an error message Error 1 to compile failed. Refer to the picture below.

	🕞 Console 🕸 🛄 Properties 🔐 Problems) 🖉 Terminal) 🏭 Function Code Size) 🏭 Static Stack Analysis) 🐻 Progress	₿ <b>😚 😫</b>	📰 🚮 = 🖳 🗖	! 🗉 + 📑
	CDT Build Console [HY16F3910 ADC]			
	/cygdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug/. /Project/Display.c:186: undefined reference to DrvLCD_LCDBuffer			
	/cygdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/Display.c:186: undefined reference to `DrvLCD IOMode'			
	/cygdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/Display.c:186: undefined reference to `DrvLCD IOMode'			
	/cygdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/Display.c:186: undefined reference to `DrvLCD IOMode'			
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/Display.c:186: undefined reference to `DrvLCD IOMode'			
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/Display.c:186: undefined reference to `DrvLCD IOMode'			
	./Project/Display.o:/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/Display.c:186: more undefined refer	ences to	DryLCD IOMode	follow
	/Project/Display.o: In function 'RAM2LCD':			
	/cvudrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug/./Project/Display.c:201: undefined reference to 'DryLCD WriteData			
	/Project/main.o: In function 'main':			
5	/vvddive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug/./Project/main.c:242: undefined reference to `DrvCLOCK EnableHight	osc'		
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:242: undefined reference to `DrvCLOCK SelectIMOS	c'		
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:242: undefined reference to `SYS EnableGIE'			
	/Project/main.o: In function `InitalADC':			
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:262: undefined reference to `DrvPMU VDDA LDO Ctr.	11		
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:263: undefined reference to `DrvPMU VDDA Voltage			
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:264: undefined reference to `DrvPMU BandgapEnably	e!		
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:270: undefined reference to `DrvADC SetADCInputC	hannel'		
	/vugdrive/c/Users/Robert Nang/AndeSight3/worksnace/HY16F3910 aDC/Debug/, /Project/main.c:271: undefined reference to `DrvaDC Gain'			
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:272: undefined reference to `DrvADC DCoffset'			
	/vuddrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug/. /Project/main.c:273: undefined reference to `DrvADC RefVoltage'			
	/vuggrive/c/Users/Robert.Wang/AndeSight3/worksnace/HV16F3910 ADC/Debug/. /Project/main.c:274: undefined reference to `DrvADC FullRefRange			
	/vuggive/c/Users/Robert.Wang/AndeSight3/worksnace/HV16F3910_ADC/Debug/./Project/main.c:277: undefined reference to `DrubDC OSE'			
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug//Project/main.c:280: undefined reference to `DrvADC ClearIntFlag			
	/cvgdrive/c/Users/Robert.Wang/AndeSight3/workspace/HY16F3910 ADC/Debug/./Project/main.c:281: undefined reference to 'DrvADC EnableInt'			
	/vuddrive/c/Users/Robert.Wang/AndeSight3/workspace/HV16F3910 ADC/Debug/./Project/main.c:282: undefined reference to `DrvADC Enable'			
	/vydrive//Users/Robert.Mand/AndeSight3/workspace/WY16F3910_ADC/Debud//Project/main.cl283: undefined reference to `DryADC CombFilter'			
	collect2: error: 1d returned 1 exit status			
	make: *** [makefile:71: HY16F3910 ADC.adx] Error 1			



To solve this question, please select Clean Project before Build Project. Refer to the picture below.



# 8.11. Rename the project name in the AndeSight IDE software and cannot Debug normally

Users rename the project name in the AndeSight IDE software.

Ex: HY16F3910\_ADC changed its name to HY16F3910\_ADC\_Rename.

After Rename the project name, the Build project will generate a new

HY16F3910\_ADC\_Rename.adx. At this time, the old project setting files

HY16F3910\_ADC.adx and HY16F3910\_ADC.launch should be removed. Refer to the picture below.





To remove the old project settings first, and then re-set new Debug Configurations for the project HY16F3910\_ADC\_Rename.Refer to the picture below.

A Debug Configurations	
Create, manage, and run configurations	
Image: Second system       Image: Second system         Image: Second	Name:       HY16F3910_ADC_Rename Debug         Main       Debugger       Startup         Project:       HY16F3910_ADC_Rename         Program:       Debug\HY16F3910_ADC_Rename.adx         RTOS Awareness Debugging:       \${AUTO}         Target Management Service       Flash Programming Before Debugging

For the setting method of Debug Configurations, please refer to the "debug mode" in chapter 6.6 for setting.



### 9. Revisions

Greater differences in the document are presented below, with variation in punctuation and font excluded.

Version	Page	Revision Summary	Date
V01	ALL	First edition	2022/05/12
V02	ALL	1. "AndeSightV3.2.1RDS" was renamed	2022/06/08
		"AndeSightV3.2.xRDS".	
		2. Modify the pictures in Chapter 6.6.	
		3. Added the Chapter 8.9~8.11.	