

Sonix SN8F5959 Series Microcontroller Starter Kit User **Manual**

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Sonix SN8F5959 Series Microcontroller Starter Kit



Product Information

• Product Name: SN8F5959 Starter-Kit

• Manufacturer: SONiX Technology Co., Ltd.

Microcontroller: 8051-based SN8F5959/ SN8F5958 family

Website: <u>www.sonix.com.tw</u>

Overview of Starter Kit

The SN8F5959/ SN8F5958 Starter-Kit is an easy-development platform that provides a simple way to develop applications using the SN8F5959/ SN8F5958 family microcontrollers. The kit includes a real chip from the SN8F5959/ SN8F5958 family and I/O connectors for input signals or driving user application devices. It can be used as a target board when the actual target board is not ready. The Starter-Kit can be replaced by the target board as the SN8F5959/ SN8F5958 family integrates an embedded ICE in-circuit debugger circuitry.

Development Environment

The SN8F5959/ SN8F5958 debug tool works with Keil C51, which includes an integrated development environment (IDE) called Keil Vision, C51/A51 compilers, and BL51 linker. For detailed information, refer to the SN8F5959/ SN8F5958 Debug Tool User Manual available for download on the **SONIX website**.

Setup Instructions

- 1. Confirm that all elements on the circuit board are complete.
- 2. The power source for the Starter-Kit circuit should be within the range of 2.0V to 5.5V.
- 3. Connect crystal/resonator oscillator components to the XIN and XOUT pins when setting the timer clock to X'tal

or T0 Timer setting RTC mode.

- 4. The Debug port can be connected to the SN-LINK adapter for emulation or code download.
- 5. The MCU LED will light up, and the SN8F5959/ SN8F5958 family chip will be connected to power when the power (VDD) is switched on.

Schematic

The user manual provides a schematic diagram of the SN8F5959 Starter-Kit. Please refer to the manual for a detailed schematic diagram.

Overview of Starter Kit

SN8F5959 / SN8F5958 Starter-Kit provides easy-development platform. It includes SN8F5959/ SN8F5958 family real chip and I/O connectors to input signal or drive device of user's application. It is a simple platform to develop application as target board not ready. The Starter-Kit can be replaced by target board, because SN8F5959/ SN8F5958 family integrates embedded ICE in-circuit debugger circuitry.

Development Environment

SN8F5959/ SN8F5958 debug tool cooperate with Keil C51 which includes integrated development environment (IDE, Keil µVision), C51/A51 compliers and BL51 linker. See detailed documentation of SN8F5959/ SN8F5958 Debug Tool User Manual (download on www.sonix.com.tw).

Development Environment

These configurations must be setup completely before starting Starter-Kit developing.

- 1. Confirm to the circuit board whether elements are complete.
- 2. The power source of Starter-Kit circuit is 2.0~5.5V.
- 3. "XIN" pin and the "XOUT" pin need to connect crystal/resonator oscillator components when timer clock is setting X'tal or T0 Timer setting RTC mode.
- 4. The Debug port can connect SN-LINK adapter for emulation or download code.
- 5. The MCU LED will light up and SN8F5959/ SN8F5958 family chip will be connected to power when power (VDD) is switched on.

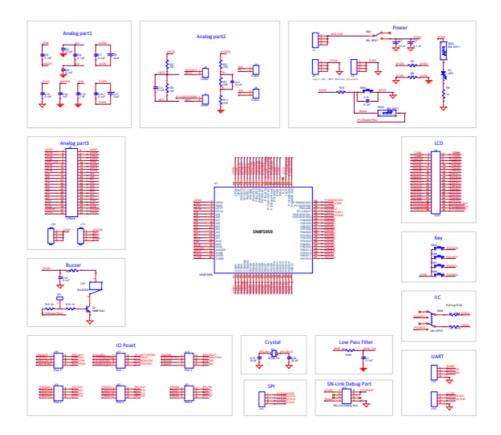
Revision History

Revision	Date	Description
1.0	JUN 2022	First issue.

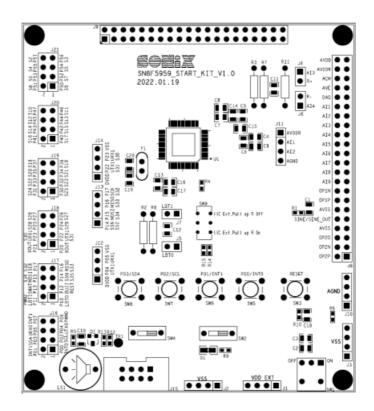
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SN8F5959 Starter-Kit

Schematic



Floor Plan of PCB layout



Component Description

Number	Description
C13	VLCD function capacitor.
C14,C15	AVDDR,AVE capacitor.
C6	ADC input differential capacitor .
J5,J7	LBT function connector.
R2,R8,C12	LBT capacitor and resisters.
C7,C8	AVDD power regulators capacitance.
C16,C17	DVDD power regulators capacitance.
J1	Power source.
J8	ADC input pin connection.
J2,J3	DVSS pin.
D1,R9	MCU LED and resister.
J16-J21	I/O connector.
SW5-SW8	I/O button.
R4,R5	0 ohm resisters.
J9	LCD function connector.
SW3,R10,C18	External reset trigger source
SW4	External reset trigger function switch.
Y1,C19,C20	External crystal/resonator oscillator components.
SW1	Target power (VDD) switch.
J15	Debug Port
U1	SN8F5959 real chip (SONiX standard option).

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Documents / Resources



Sonix SN8F5959 Series Microcontroller Starter Kit [pdf] User Manual SN8F5959, SN8F5959 Series Microcontroller Starter Kit, SN8F5959, Series Microcontroller Starter Kit, Microcontroller Starter Kit, Starter Kit

References

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- S :: Sonix Technology Co., Ltd. ::
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