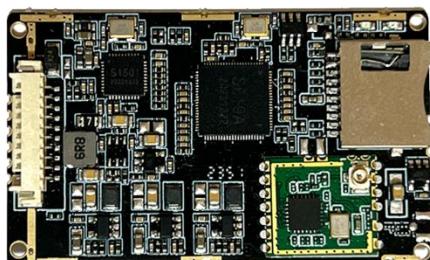
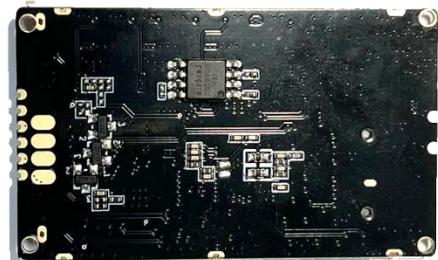


SF1534A

AHD and CVBS turn WIFI video transmission module specification



Top View



Bottom View



SUNFLOWER ELECTRONICS CO., LIMITED

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Address: Room 603, Plant N0.9, Tanglang Tongfu Industrial City,Taoyuan Street,Nanshan District,Shenzhen,CN.

Www.SunflowerTech.cn

Revision History

SF1534A video wireless transmission module			
Revision	Summary	Release Date	Revised By
1.0	Official release	2024-07-15	Dany

一、 Introduction

SF1534A image wireless transmission module: is a WIFI video wireless transmission module based on the global open 2.4G ISM frequency band launched by Shenzhen Golden Sunflower Technology Co., Ltd.

Support Video format CVBS, Also Supported Standard AHD signal input, support 1080P resolution, through processing and sent to the mobile .client through WIFI display, support IOS or Android system mobile phones and tablets.

It adopts the mature wireless standard 802.11B/G/N, which has strong anti-interference, large bandwidth and strong device compatibility. With IOS or Android platform client software, you can send and receive control commands to the module on the mobile device. For rich control interfaces: UART, PWM, GPIO and other interfaces, which can communicate with their external devices in a variety of ways. The module's small size makes it easy to implant into the main application system.

二、 Module features :

Operating Frequency: 2.412-2.462GHZ

IEEE Standards: IEEE 802.11B/G/N

Communication distance \geq 50m (open area)

Support Video format:1> AHD 1080p 25 frame. 2> CVBS.

Low latency \leq 200mS

Small size: 54mmx32mmx7mm

External Antennas

Power Supply: DC3.6-5.0V

Support IOS/ANDROID/PC APP and software

Support transparent serial port transmission, mobile phone control device

三、 Electrical parameters

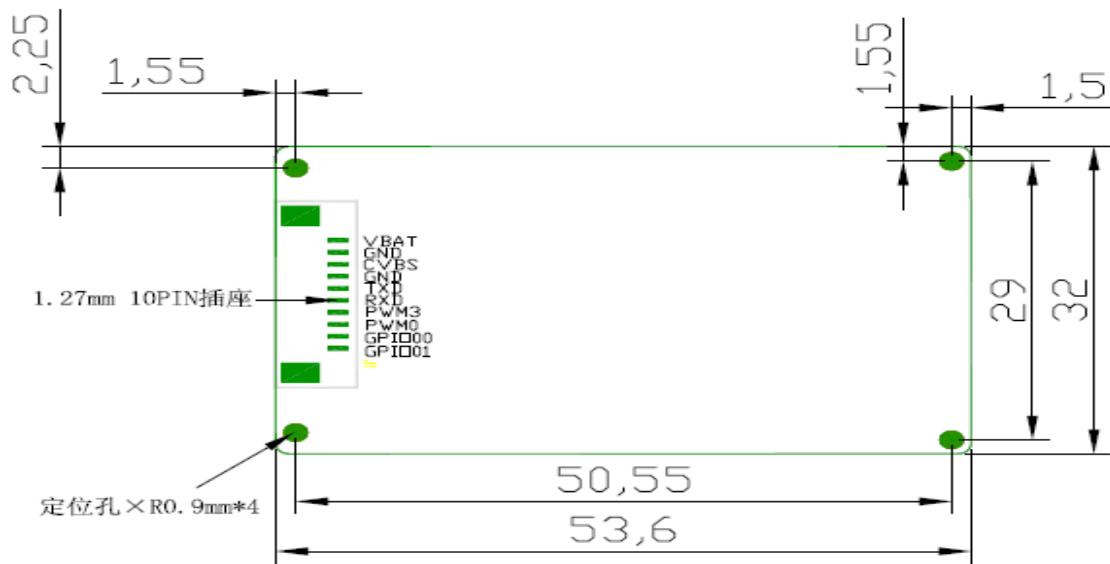
SF1534A video wireless transmission module: electrical characteristics		
1	Operating voltage	3.6-5.0V
2	Operating current	\leq 300~350mA
3	Power-on start time	10 second \pm 2 second

SF1534A video wireless transmission module: Wireless performance parameters		
1	Rated current	≤350mA(Maximum power output)
2	Wireless communication	IEEE802.11b/g/n
3	Rated power	13 dBm +2 dBm
4	Communication protocol	(UART/GPIO)
5	Serial port protocol	IP address: 192.168.11.10 Port number: 2001 Baud rate: 115200
6	Power-on start time	≤10S ±2S
7	RF port standing wave	≤1.3
8	Distance	≤50~100m open area
9	Signal input format	AHD 1080 25 frames, CVBS
10	Image resolution	1080P_25 frames
11	Delay	≤200ms

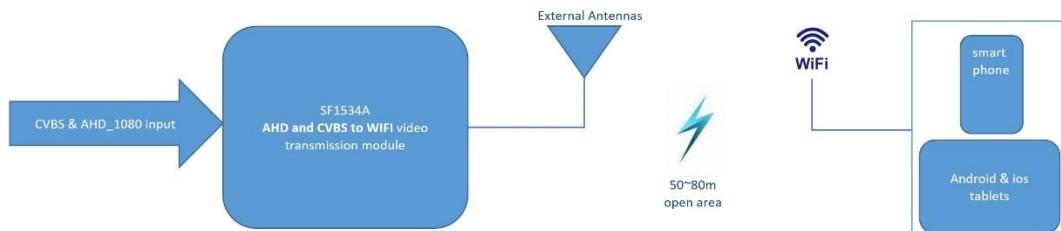
SF1534A video wireless transmission module: Other parameters		
1	ANT	External antenna
2	Size	54mm*32mm*7mm
3	Operating temperature	-10°C ~ +50°C
4	Storage temperature	-20°C ~ +60°C

SF1534A video wireless transmission module: Module interface definition		
1	GPIO_1	NC
2	GPIO_0	NC
3	PWM0	IO port
4	PWM3	IO port
5	UART_RX	Serial port communication reception
6	UART_TX	Serial communication transmission
7	GND	Video GND
8	AHD_VIDEO	AHD VIDEO IN
9	GND	DC_GND
10	VBAT	3.6-5.5V DC

SF1534A video wireless transmission module: Module interface diagram



SF1534A video wireless transmission module: Application diagram



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Warning

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 20cm must be maintained between the user's body and the handset, including the antenna.

This product can be used across EU member states.

2.4GWi-Fi frequency range: 2412-2472MHz, Maximum E.I.R.P: 14.76dBm

RED 2014/53/EU

Declaration Of Conformity

This product can be used across EU member states .

Hereby, SUNFLOWER ELECTRONICS CO., LIMITED declares that this wireless video module is in compliance with the essential requirements and other relevant provisions of directive 2014/53/EU.

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help important announcement

Important Note:

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance

20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/Canada.

This device is intended only for OEM integrators under the following conditions:

1. The antenna must be installed such that 20 cm is maintained between the antenna and users, and
2. The transmitter module may not be co-located with any other transmitter or antenna,
3. For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change. (if modular only test Channel 1-11)

As long as the three conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Integration instructions for host product manufacturers according to KDB 996369 D03

OEM Manual v01

2.2 List of applicable FCC rules

CFR 47 FCC PART 15 SUBPART C and PART 15 SUBPART E has been investigated. It is applicable to the modular transmitter

2.3 Specific operational use conditions

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.

2.4 Limited module procedures

Not applicable

2.5 Trace antenna designs

Not applicable

2.6 RF exposure considerations

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

2.7 Antennas

This radio transmitter **FCCID: 2BKA8-SF1534A** has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Model	Type	Connector	Peak gain (dBi)				
			2400-2483.5 MHz	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz
S-0001-T	External Antenna	/	2.00dBi	/	/	/	/

2.8 Label and compliance information

The final end product must be labeled in a visible area with the following" Contains FCC ID:2BKA8-SF1534A".

2.9 Information on test modes and additional testing requirements

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.

2.10 Additional testing, Part 15 Subpart B disclaimer

This transmitter module is tested as a subsystem and its certification does not cover the FCC Part 15 Subpart B rule requirement applicable to the final host. The final host will still need to be reassessed for compliance to this portion of rule requirements if applicable.

2.11 Important Note:

In the event that these conditions cannot be met (for example certain laptop configurations or

co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

2.12 End Product Labeling

When the module is installed in the host device, the FCC ID label must be visible through a window on the final device or it must be visible when an access panel,door or cover is easily re-moved.If not, a second label must be placed on the outside of the final device that contains the following text:"Contains FCCID: **2BKA8-SF1534A** ".The FCC ID can be used only when allFCC compliance requirements are met.

2.13 Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

ISED Statement

- English: This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device. The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

- French: Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique ubi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This radio transmitter (ISED certification number: **32904-SF1534A**) has been approved by Industry Canada to operate with the antenna types listed with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (ISED certification number: **32904-SF1534A**) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Radiation Exposure Statement

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations

Cet équipement est conforme aux limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimum de 20cm entre le radiateur et votre corps.

This device is intended only for OEM integrators under the following condition:

The transmitter module may not be co-located with any other transmitter or antenna.

As long as the condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Cet appareil est conçu uniquement pour les intégrateurs OEM dans les conditions suivantes:

Le module émetteur peut ne pas être co-implanté avec un autre émetteur ou antenne.

Tant que les 1 condition ci-dessus sont remplies, des essais supplémentaires sur l'émetteur ne seront pas nécessaires. Toutefois, l'intégrateur OEM est toujours responsable des essais sur son produit final pour toutes exigences de conformité supplémentaires requises pour ce module installé.

Important Note:

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the Canada authorization is no longer considered valid and the IC cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate Canada authorization.

Note Importante:

Dans le cas où ces conditions ne peuvent être satisfaites (par exemple pour certaines configurations d'ordinateur portable ou de certaines co-localisation avec un autre émetteur), l'autorisation du Canada n'est plus considérée comme valide et l'IC ne peut pas être utilisée sur le produit final. Dans ces circonstances, l'intégrateur OEM sera chargé de réévaluer le produit final (y compris l'émetteur) et l'obtention d'une autorisation distincte au Canada.

End Product Labeling

The final end product must be labeled in a visible area with the following: Contains IC:

32904-SF1534A.

Plaque signalétique du produit final

Le produit final doit être étiqueté dans un endroit visible avec l'inscription suivante: Contient des IC:

32904-SF1534A

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as shown in this manual.

Manuel d'information à l'utilisateur final

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module.

Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqués dans ce manuel.