

1 Product Information

1.1.1 Product External Photos

Refer to External and Internal Photos.

1.1.2 System Composition

The system consists of four radars, with associated components including front left/front right/rear left/rear right radar brackets.

The software and hardware of the front left/front right/rear left/rear right radar are identical. After installation, the PIN11 and PIN12 address bits are identified to achieve automatic adaptation of the installation position.

1.1.3 Electronic Diagram

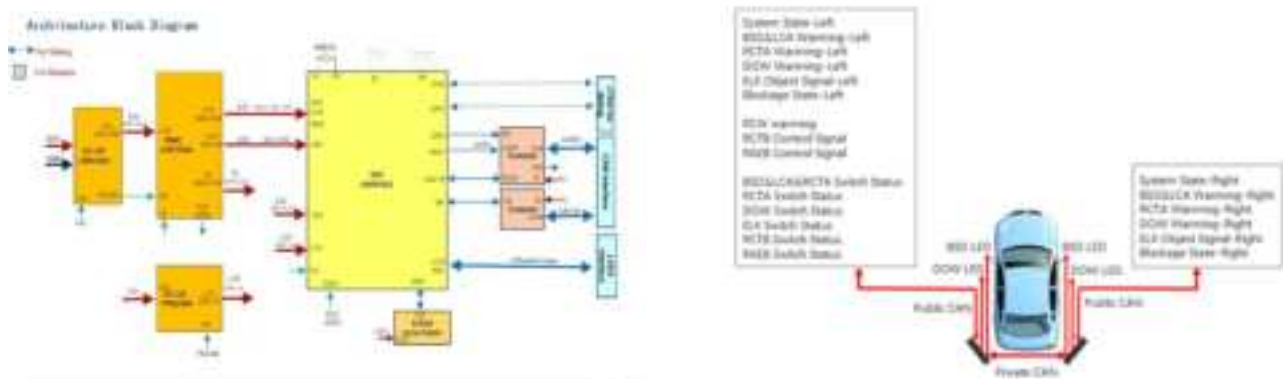


Figure 1 Block Diagram

1.1.4 Product Feature List

No	Feature	Feature description
1	BSD	Blind Spot Detection
2	LCA	Lane Changing Assist
3	RCTA	Rear Cross Traffic Alert
4	RCTB	Rear Cross Traffic Assist/Brake
5	RAEB	Rear Autonomous Emergency Braking
6	DOW	Door Open Warning
7	RCW	Rear Collision Warning
8	ELK	Emergency Lane Keep System

1.1.5 Interface Definition

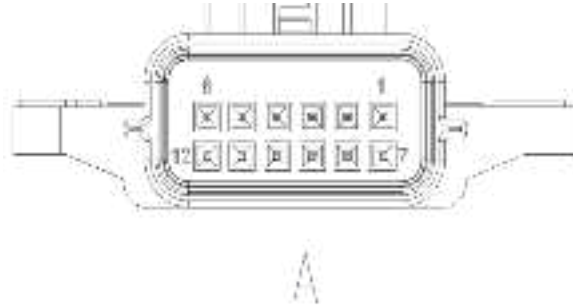


Figure 3 Interface Definition

Interface no.	Interface description	Rated Current (A) 12V, 25°C	Min Current (A) 12V, 25°C	Circuit Requirement		
				Resistance	Special cable	Terminal coating requirements
1	CAN1_H					
2	CAN1_L					
3	CAN2_H					
4	CAN2_L					
5	Blank					
6	Blank					
7	GND	0.3	0.5			
8	Battery	0.3	0.5			
9	BSD	0.01	0.1			
10	DOW	0.01	0.1			
11	ADDRESS1	0.01	0.015			
12	ADDRESS2	0.01	0.015			

The software and hardware of the left and right radar bodies are identical, and after installation, automatic adaptation is achieved through PIN11 and PIN12 address bit recognition. The address PIN is defined as follows:

External address input		MCU detection		Location or Work Mode
Address1 (Pin11)	Address2 (Pin12)	Address1	Address2	
NC (Open)	NC (Open)	Low	Low	Left Front
NC (Open)	GND	Low	High	Right front
GND	NC (Open)	High	Low	Left rear
GND	GND	High	High	Right rear

1.1.6 Functional Parameters

Items	Parameters
Nearest detection distance	0.2m
Nearest detection distance	100m
Distance accuracy	0.2m
Distance resolution	0.4m
Speed dynamic range	±80m/s
Speed accuracy	0.1m/s
Speed resolution	0.26m/s
Horizontal azimuth	±75°
Vertical azimuth	±10°
Horizontal angle accuracy	0.2°
Horizontal angle resolution	5°
Vertical angle accuracy	0.5°
Minimum target update rate	15Hz

Regulatory and Legal Information



Frequency band of operation: 76GHz to 77GHz
 Max RF output power: xxdBm
 Accessories: N/A

Hereby, Huizhou Desay SV Automotive Co., Ltd. declares that the radio equipment type SRD3523/18 is in compliance with Directive 2014/53/EU.
 The full text of the EU declaration of conformity is available at the following internet address:
<https://www.desaysv.com/compliance>.

FCC

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

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.

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.

Maximum Permissive Exposure Statement

This products comply with CE and FCC radiation exposure limits set forth for an uncontrolled environment. It is recommended that equipment should be installed and operated with minimum distance of 20cm between the radiator and your body.