

79GHz MIMO RADAR PLATFORM

■ FEATURES

- miRadar™48e is a 79GHz radar sensor module that can identify distance, azimuth angle, elevation angle, and speed of the target.
- High accuracy 3D detection by 48elements virtual array using MIMO technology
- Excellent distance resolution by 4GHz wide bandwidth
- USB3.0 super speed interface

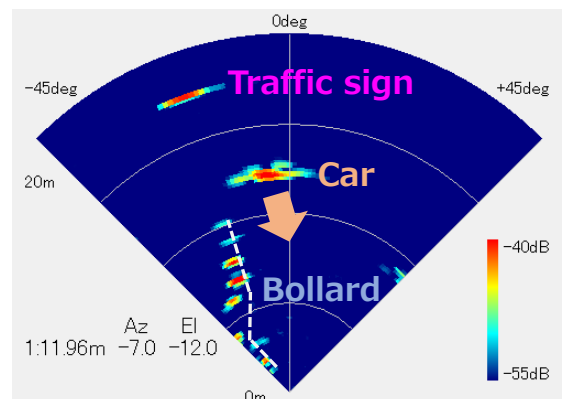
■ APPLICATIONS

- Obstacle detection system for drone and AGV
- Traffic monitoring system
- Blind spot monitoring system for construction machine
- Social welfare service robot
- Respiratory monitor human sensor
- Human tracking system

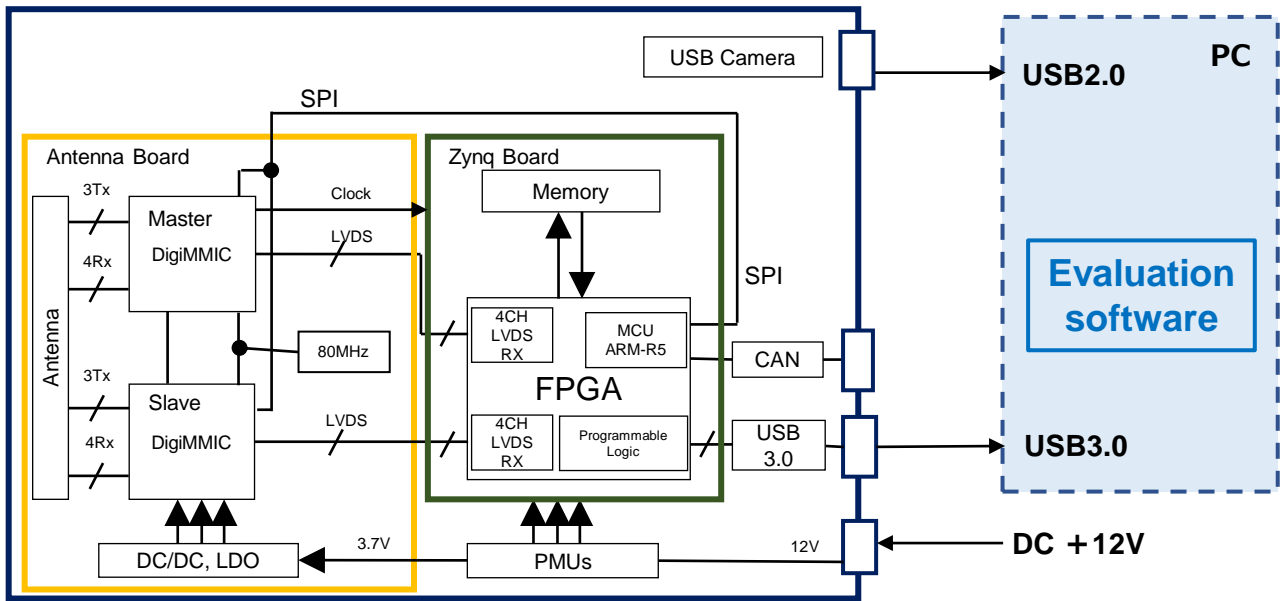
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■ SPECIFICATIONS

- Frequency : 79GHz
- Type of radar system : MIMO FMCW 79GHz (ARIB-STD-T111 Japan)
- Output power : 10 dBm
- Number of antenna : Tx6ch, Rx8ch
- Detection angle : El $\pm 10^\circ$ & Az $\pm 45^\circ$
- Resolution : Distance 0.1m & Az $3^\circ/6^\circ$
- Size(mm) : 150 x 205 x 60
- Interface : USB Type-C for radar
USB 2.0 for camera
- Power : DC+12V, 15w

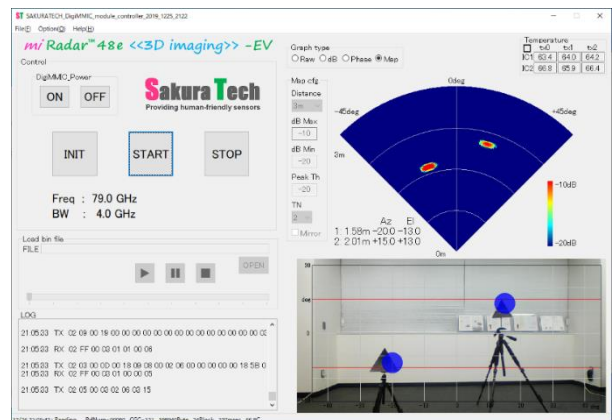


■ BLOCK DIAGRAM



■ EVALUATION SOFTWARE

- Hardware control, show status information.
- Raw data, Disp. and save to binary file.
- FFT, Disp. Amplitude and phase vs distance
- Polar chart
- Target detection, distance and angle(Az&El)
- Speed detection
- Load binary file, Disp. And Converts to CSV
- Disp. target position on USB camera image



GUI

■ PRODUCTS

Product Name	Product Number	Comments
miRadar [®] 48e SK1	B283-01	79GHz MIMO Radar Eval Kit, Antenna Pattern SK1, 2Tx / 8Rx (virtual 16ch)
miRadar [®] 48e SK2	B283-02	79GHz MIMO Radar Eval Kit, Antenna Pattern SK2, 4Tx / 8Rx (virtual 32ch)
Evaluation software	B283-SW	79GHz Evaluation Kit software

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