

FJM35 2T2R1OR SDR

FJM35 SDR Software Defined Radio

FPGA ARM SoC DDC

DUC

23mm × 23mm

FJM35 30MHz 7GHz 20kHz 70MHz

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FPGA ARM SoC

FJM35

FJM35 2T2R1OR SDR

- SDR
- 2T3R
- FPGA + ARM SoC
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- DBF
-
- IQ
- Linux FPGA
-
- SERDES
-
- 2T3R
- 30 MHz – 7GHz
- 20kHz~70MHz
- TDD FDD
- ADC/DAC 16

FJM35 2T2R1OR SDR

- ≤ 40000 /S
 - - TX $\geq 5\text{dBm}$
 - TX $\leq -60\text{dBm}$
 - TX $\geq 60\text{dBc}$
 - TX 0dB~36dB
 - TX OIP3 $\geq 25\text{dBm}$
 - - RX 30dB
 - RX $\geq 60\text{dBc}$
 - $\leq 16\text{dB}$
 - OIP3: $\geq 40\text{dBm}$
- 5 PLL
- 35MHz~240MHz
-
- FPGA **XC7K325T**
-

FJM35 2T2R1OR SDR

➤ Logic Cells 326,080

➤ LUT 6 203,800

➤ Flip-Flops 407,600

➤ CLB 25,475

●

➤ Block RAM BRAM 445 × 36 Kb 16,020 Kb 15.6 Mb

➤ RAM LUT RAM 2,000 Kb

➤ ECC 64 BRAM ECC

● DSP

➤ DSP Slice 840

➤ DSP 25×18 48

➤ 2,845 GMAC/s

●

GTH/GTX

➤ 12

➤ 12.5 Gb/s

MCU XC7Z020

●

ARM Cortex-A9

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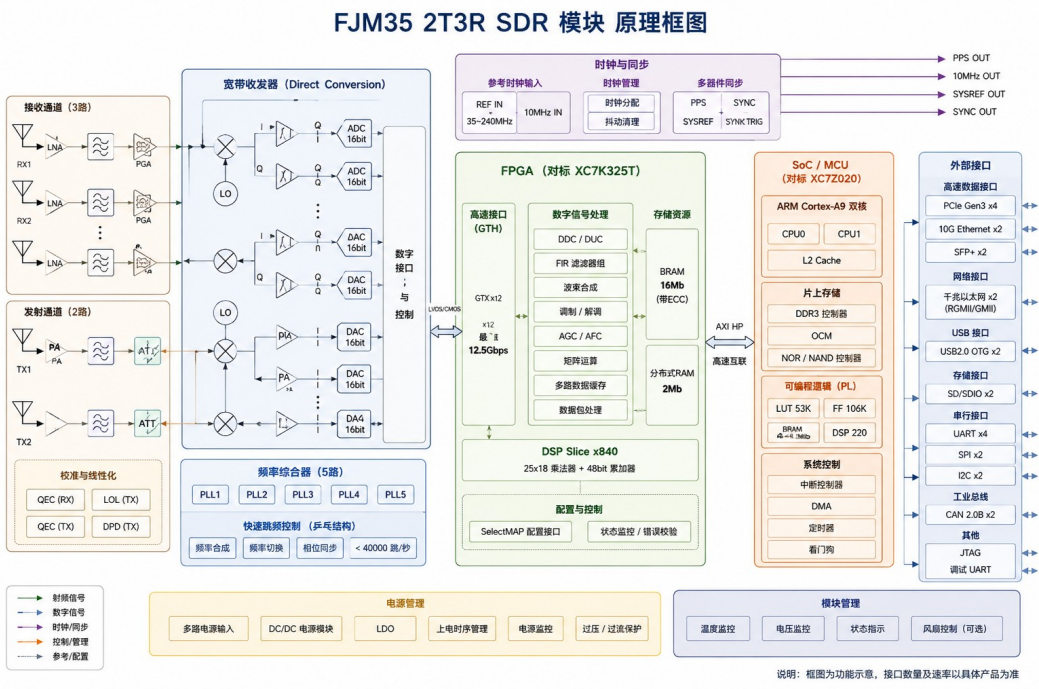
- PS

- 2 GMII/RGMII IEEE 1588 PTP
- USB 2 USB 2.0 OTG Host/Device/OTG
- 2 SD/SDIO SD 3.0
- 4 UART 2 SPI 2 I2C
- 2 CAN 2.0B

- PL Artix-7

- Logic Cells 85,000
- LUT 6 53,200
- Flip-Flops 106,400
- CLB 6,650
- Block RAM BRAM 140 × 36 Kb 4.9 Mb
- RAM 560 Kb
- DSP 220 DSP48E1 Slice 18×18 48

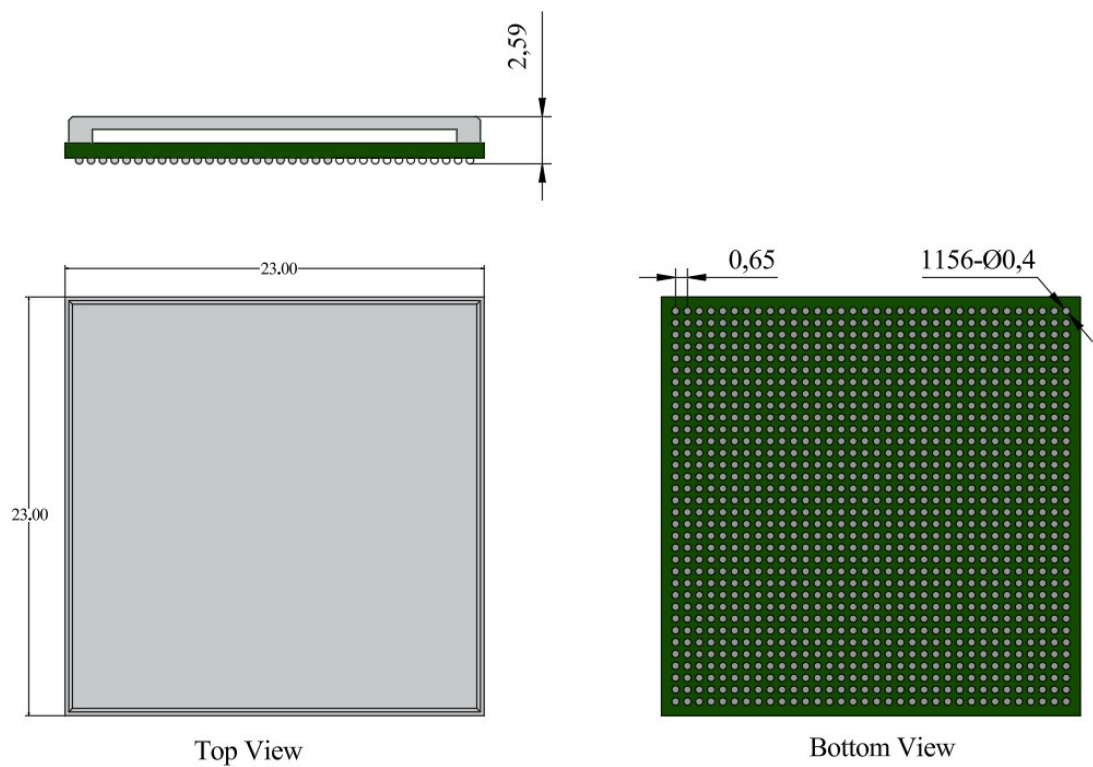
FJM35 2T2R1OR SDR



- Linux
- Baremetal
- FPGA
- Vivado
- PetaLinux
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- API

- FPGA
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-
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FJM35 2T2R1OR SDR



23×23×2.59mm

/ BGA/1156

650um

● BGA 400um