MWJ Puzzler

RADAR AND ANTENNAS

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The crossword grid answers:

Across:
- 4 FPGA
- 6 RISE TIME
- 8 WILKINSON
- 10 BUTLER MATRIX
- 12 BUNGEE
- 14 DUTY CYCLE
- 15 COTS

Down:
- 1 DIRECTIONAL COUPLER
- 2 PEAK POWER
- 3 MIMO
- 5 AMPLITUDE
- 7 DIGITAL RF MEMORY
- 9 OVERSHOOT
- 11 AESA
- 13 ADC

Across

4 A device with an array of configurable logic blocks with each cell of the block programmable to perform one of many functions

6 The time for a power pulse to reach its target value (2 words)

8 A power divider consists of two parallel uncoupled λ/4 transmission lines

10 A type of beamforming network that enables the antenna beam is steered depending on the ports fed (2 words)

12 Short for Beyond Next Generation Mobile Broadband

14 Calculated by dividing the power envelope pulse width by the pulse repetition interval (2 words)

15 Short for Commercial Off the Shelf

Down

1 A device that is typically constructed from two coupled transmission lines set close enough together such that energy passing through one is coupled to the other (2 words)

2 Calculated by dividing the average power value by the duty cycle measurement (2 words)

3 Short for multiple input multiple output

5 The power difference in dB between the two output ports of a 3 dB hybrid (2 words)

7 Enables the capture of a radar signal for anaylsis or re-transmit back with changes to fool the enemy (3 words)

9 When a power pulse goes higher than intended on the initial pulse

11 A type of active radar that includes hundreds or thousands of T/R modules in an array

13 Short for analog-to-digital converter