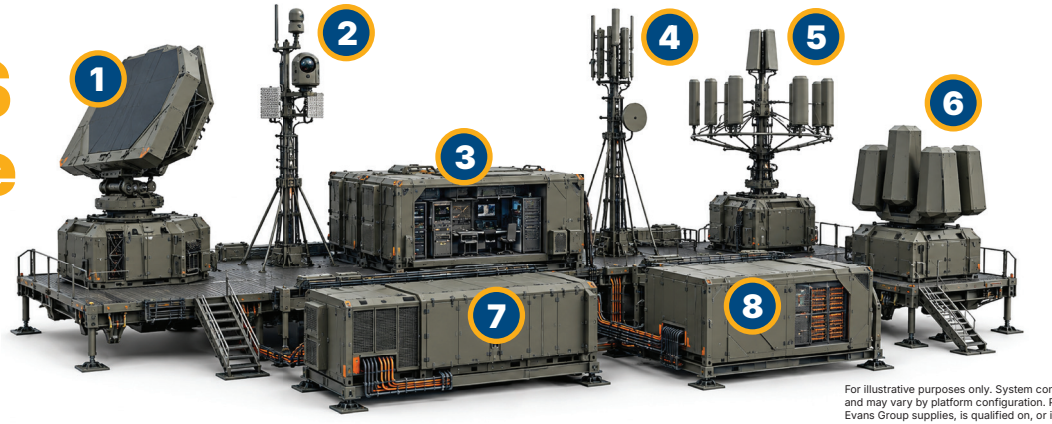
Where Capacitors Impact

Counter-UAS & Air Defense Systems



Evans GROUP

Power.
Precision.
Mission Life.

Technology Key

Evans: Hybrid Wet Tantalum

Paktron: Multilayer Polymer Film (stacked)

UTC: High-reliability Ceramic

Eulex: RF & High-frequency Ceramic

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For illustrative purposes only. System configurations and applications vary. Subsystem locations shown are representative and may vary by platform configuration. Product placement identifies potential areas of applicability and does not imply that Evans Group supplies, is qualified on, or is installed on every platform or subsystem shown.

1. Surveillance Radar & RF Sensing

CAPACITOR FUNCTIONS

- T/R-module rail decoupling
- RF DC blocking and coupling
- Waveform and clock filtering
- Transmit-pulse energy support
- Receiver/LNA bias stabilization



BEST FIT TECHNOLOGIES

Evans: Ultra-low ESR minimizes voltage droop

Paktron: Thermal stability for timing circuits, with low ESL and high dv/dt capability for pulsed T/R systems

UTC: Low-ESL decoupling for T/R modules and signal electronics

Eulex: Low-loss RF matching, coupling, DC blocking, and bypass

2. Passive RF & EO/IR Sensing

CAPACITOR FUNCTIONS

- Sensor-rail filtering
- Receiver-front-end decoupling
- RF signal coupling
- Gimbal-drive filtering
- Low-noise bias stabilization



BEST FIT TECHNOLOGIES

Evans: Bulk energy storage for efficient, persistent sensing electronics

Paktron: Input filtering and transient suppression for sensor power

UTC: Precision low-ESL filtering for EO/IR and receiver electronics

Eulex: RF coupling, matching, DC blocking, and igh-frequency bypass

3. Tracking, Identification & Sensor Fusion

CAPACITOR FUNCTIONS

- Processor/FPGA decoupling
- ADC/DAC rail filtering
- Timing/reference stability
- Memory and track-file hold-up
- High-speed I/O noise control



BEST FIT TECHNOLOGIES

Evans: Power hold-up for sensor-fusion processors and critical memory

Paktron: Thermal stability and low ESL for timing, processing, and sensor-fusion circuits

UTC: Low-ESL decoupling for processors, timing, and data conversion

Eulex: High-frequency bypass and clock/signal coupling

4. Command, Control, Mission Computing & Networking

CAPACITOR FUNCTIONS

- Mission-computer decoupling
- Network-interface filtering
- Data-bus noise suppression
- Control and memory hold-up
- Timing and synchronization



BEST FIT TECHNOLOGIES

Evans: Hold-up support for command, control, and safe-state functions

Paktron: Power-bus filtering and high thermal stability for mission-computing and timing circuits

UTC: Low-ESL decoupling for processors and network electronics

Eulex: High-frequency bypass and signal-path coupling

5. Electronic Warfare & RF Countermeasures

CAPACITOR FUNCTIONS

- RF matching and tuning
- PA pulse-power support
- DC blocking and coupling
- Exciter/receiver decoupling
- Fast-switching transient control



BEST FIT TECHNOLOGIES

Evans: Compact pulse support for RF countermeasure electronics

Paktron: High-ripple filtering and self-healing construction for RF power-stage resilience

UTC: Low-ESL decoupling and pulse support near switching devices

Eulex: Low-loss matching, tuning, DC blocking, and broadband bypass

6. Defensive Effector & Fire-Control Interfaces

CAPACITOR FUNCTIONS

- Fire-control rail filtering
- Actuator-interface decoupling
- Command-interface protection
- Pulse-load energy support
- Timing and sensor stabilization



BEST FIT TECHNOLOGIES

Evans: Pulse and hold-up energy for defensive-control interfaces

Paktron: Low-ESR filtering and transient suppression for actuators, with thermal stability for fire-control timing circuits

UTC: High-voltage filtering and low-ESL control-electronics decoupling

7. Power Conversion & Distribution

CAPACITOR FUNCTIONS

- AC/DC and DC/DC filtering
- Primary/secondary bus decoupling
- Point-of-load stabilization
- EMI/RFI filtering
- Load-step transient support



BEST FIT TECHNOLOGIES

Evans: High power density and bulk energy storage for critical buses/systems

Paktron: AC/DC power filtering with stable capacitance under DC bias, performance across wide temperature ranges

UTC: Low-ESL bypass, decoupling, and high-frequency filtering

8. Energy Storage, Pulse Power & System Protection

CAPACITOR FUNCTIONS

- Peak-power and pulse support
- Bus hold-up and ride-through
- Voltage-droop control
- Surge/transient protection
- Protection-control backup



BEST FIT TECHNOLOGIES

Evans: Ultra-low ESR minimizes voltage droop

Paktron: Stable capacitance under DC bias with self-healing construction for pulse-power and protection circuits

UTC: High-voltage pulse energy and low-inductance local support

THE EVANS GROUP ADVANTAGE

System-Level Breadth
Four capacitor technologies support sensing, computing, RF, power, and protection.

Pulse Power & Hold-Up
Compact energy storage supports radar, countermeasures, and critical ride-through loads.

RF Performance
Low-loss matching, coupling, DC blocking, and filtering across RF signal paths.

Rugged Reliability
Capacitor technologies for thermal cycling, vibration, high voltage, and long life.