**HaWK (High Watts per Kilogram) Series of Solar Arrays**

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**HaWK Systems Details**

- HaWK modular high performance solar array
  - Compatible with 3U and 6U form factors

**Portfolio of Designs**

- HaWK solar array architecture provides a building block approach allowing modularity and scalability
- Focus is on maintaining standard components for cost attractive power solutions

**HaWK Specifications**

- 36W BOL @ 70°C Peak Power
- 72W BOL @ 70°C Peak Power
- Advanced proprietary embeddings at >72W and targeting >40kW peak power

**Timeline of Technology Maturation**

- HaWK technology largely supported by SBIR funding
- MMA Design solar array product portfolio continues to push the state of the art (SOA) in space power performance and future missions

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**Conclusion**

- High technology readiness level
- Flight heritage 2016
- HaWK portfolio of solar array platforms is establishing state of the art technology which will enable current and future high power mission.
- Providing best-in-class power solutions with demonstrated reliability, efficient packaging, modularity, and scalable power
- Offering component commonality and innovative mechanisms aimed at providing elegant solutions at a competitive price point
- Continuous development toward new HaWK configurations to provide power up to 40kW

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**HaWK Status**

- Fully qualified for the ORS2 mission
- HaWK deployable solar arrays will be repurposed for the AFR Biarri mission

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**E-HaWK Systems Details**

- E-HaWK high power solar array
  - Multi-panel design for high power missions

**E-HaWK Specifications**

- E-HaWK high power solar array
  - 36W BOL @ 70°C Peak Power
  - 72W BOL @ 70°C Peak Power
  - Advanced proprietary embeddings at >72W and targeting >40kW peak power

**E-HaWK Status**

- Risk reduction random vibration testing complete; criteria enveloped industry standards
- Multiple 3D deployment tests completed successfully
- Thermal Cycle testing successfully performed between 80°C and -35°C, 8 cycles with 1 hours dwell