# WAVETHERM-

#### μ**ΤCA**". 3 CONDUCTION COOLED DEVELOPEMENT CHASSIS

INNOVATIVE ANGLED-FIN DESIGN YIELDS OPTIMAL HEAT TRANSFER ALONG WITH IMPROVED STRUCTURAL STABILITY FOR SMALL, EFFICIENT SYSTEMS SUCH AS MICROTCA.3.



## OPTIMIZED FOR MTCA.3



### FEATURES:

- <sup>1</sup>/<sub>2</sub> ATR WIDTH
- DESIGNED TO MTCA.3 DRAFT SPEC
- NATURAL CONVECTION
- Low Thermal Resistance ~.31C<sup>°</sup>/W
- CUSTOMIZABLE MODULE SLOTS

#### STANDARD SLOTS:

- FOUR MID HEIGHT AMC SLOTS
- FOUR HALF HEIGHT AMC SLOTS
- ONE FULL HEIGHT MCH SLOT
- ONE FULL HEIGHT PSU SLOT

#### MATERIALS:

ALUMINUM ALLOY 6061-T6:

MACHINED SIDE WALLS

#### ALUMINUM ALLOY 5052:

- SHEET METAL END BRACKETS
- SHEET METAL BACK PLANE COVER

300 SERIES STAINLESS STEEL: • ALL FASTENERS

#### **DEPLOYMENT ASSISTANCE/CUSTOMIZATION OPTIONS:**

- · CLAMSHELL MODULE DESIGN SERVICES
- MODULE AND SYSTEM THERMAL SIMULATIONS
- FULLY-COMPLIANT MECHANICAL CONFIGURATION SUITABLE FOR PRODUCT MIGRATION TO DEPLOYED PRODUCTS
- BACKPLANE LAYOUT ASSISTANCE FOR MECHANICAL CONSIDERATIONS
- · CONDUCTION COOLED AMC DEVELOPMENT KITS FOR MECHANICAL REQUIREMENTS
- SOLIDWEDGE CARD RETAINERS
- · RAPID PROTOTYPING AND PRODUCTION PARTS SUPPLIER

# WAVETHERMS

# *µTCA***<sup>\*</sup>.3** CONDUCTION COOLED DEVELOPEMENT CHASSIS



# THERMAL:

- ESTIMATED THERMAL RESISTANCE 0.31 C<sup>°</sup>/W
- ANGLED FINS DISTRIBUTE HEAT EVENLY ACROSS
  MULTIPLE SLOTS
- ADDITIONAL COOLING PROVIDED BY OPTIONAL FANS





### CFD SIMULATION:

- NATURAL CONVECTION 0 SEA LEVEL
- 150 WATTS APPLIED TO AMC MODULE CONTACT AREA
- 47°C TEMPERATURE RISE
- ANGLED FINS SPREAD HEAT EVENLY