# SBCM

## Soldier Borne Compute Module

The SBCM (Soldier Borne Compute Module): an innovative Nett Warrior hub designed for seamless integration, for both man carrying and vehicle mounting. Pioneering the convergence of computing prowess and versatility, the SBCM empowers soldiers with the ability to command multiple EUDs effortlessly. With its integrated compute module and Nett Warrior hub, alongside the flexibility of attaching two additional twist on batteries that mount directly onto the module, the SBCM redefines tactical computing. Harnessing the power of open architecture software, developers can unlock endless possibilities for programming and customization, ensuring adaptability for evolving missions.

## Mechanical

| | |
|---|---|
| Finish | Black Anodized Aluminum |
| Weight | 1.2 lbs / 550 g (Without batteries) |
| Dimension | 5.71 × 3.45 × 1.57 inches / 145 × 87.6 × 39.8 mm (W x H x D) |
| Mounting | Body worn or vehicle mounting |

## Product HID

| | |
|---|---|
| IO | 4 x Nett Warrior receptacle, 1 x Nett Warrior plug, 2 x SRM dock, 2 x Twist-on batteries |
| Communications under bracket | RJ45, USB-A, USB-C, 40 Pin expansion port, DC Barrel Jack |
| Internal interfaces | Micro SD, M.2 2280 (4 lanes), M.2 2230 (1 lane), M.2 B key (USB only) |
| Power priority selector | Off/MBITR/Nett Warrior Power |

## Computation

| | |
|---|---|
| Board | Nvidia Orin NX |
| AI Performance | 21 TOPS (trillion ($10^{12}$) Operations Per Second |
| GPU | 384-core NVIDIA Volta™ GPU with 48 Tensor Cores |
| CPU | 6-core NVIDIA Carmel ARM®v8.2 64-bit CPU 6MB L2 + 4MB L3 |
| Memory | 16 GB 128-bit LPDDR4× 59.7GB/s |
| Storage | 16 GB eMMC 5.1 (expandable) |
| Power | 20W |

## Environmental

| | |
|---|---|
| Built To standards | MIL-STD-810-H |
| Ingress rating | IP65 (with bracket) |
| Compliance | CE compliant |
| Operating temperature | -20°C to +50°C (*Charging above 10° only) |

## Electrical

| | |
|---|---|
| Nett warrior battery | Power input |
| Nett warrior port | EUD compatibility with Nett warrior interface (1x EUD, 3x PAN) |
| IMBITR slot | Hot Swappable dynamically balancing ruggedized battery port |
| SRM Dock | Swappable Radio Module with common mechanical and electrical interface |
| USB-C | Dev Port for Nvidia Orin NX Module |
| USB-A | USB port for Nvidia Orin NX Module |
| RJ45 | ETH for Jetson NX Module |
| 40 Pin Expansion port | Display Port, USB 3.2, I2C, UART |
| DC Barrel Jack | DC power input |

## Power

| | |
|---|---|
| Voltage Requirements | 10-20 Volt DC (Input Protected) |

## Suggested Accessories

| | |
|---|---|
| Battery | 2x MBITR |
| Power supply | Nett Warrior AC charger (110-230V) |