A Software Methodology for Real Time Target Recognition

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R/T Video – Target Recognition

30 FPS – 640 x 480

VGA camera

Image on monitor

Probe Code
Target Recognition

Probe Description
R/T Video – Target Recognition

- Code uses Probesets to identify target
- Algorithm uses 20 Probesets
  - Each set has 50 probes
  - Downsized sets
    - Three cascaded 5/6 sets
      - 40x40, 33x33, 28x28, 24x24
    - Rotation sets
      - 2 to right and 2 to left
- Probe operation
  - 3 memory accesses
    - 2 pixels, threshold
  - Subtract of pixel values
  - Compare of threshold
  - Add number of probes above threshold
Portable MAPstation™

10/100 Base T Ethernet (on rear)

External Power Connector (on rear)

Battery/Aux Bay Access Panel (on rear)

Extruded Aluminum Case

Auxiliary +5V

Locking Power Switch

SVGA

Dual USB 2.0

Status LEDs

2 User Input & System Reset Buttons

2 GPIO Ports

Front to Back Air Flow

Adjustable Nylon Hand Strap

Shoulder Strap D Ring

Overall dimensions are 3" H x 10.5" D x 6" W
Overall weight with battery is 8.5 pounds