

DreamBook T89 8.9"

Rugged Tablet PC

Green & Tough





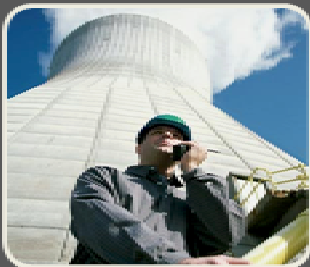
- Target market
- Product features
- Product specification

Target market



Fully ruggedized

- Extreme operating condition
- Industrial, military, law enforcement application
- Shock, vibration and drop resistant



Semi ruggedized

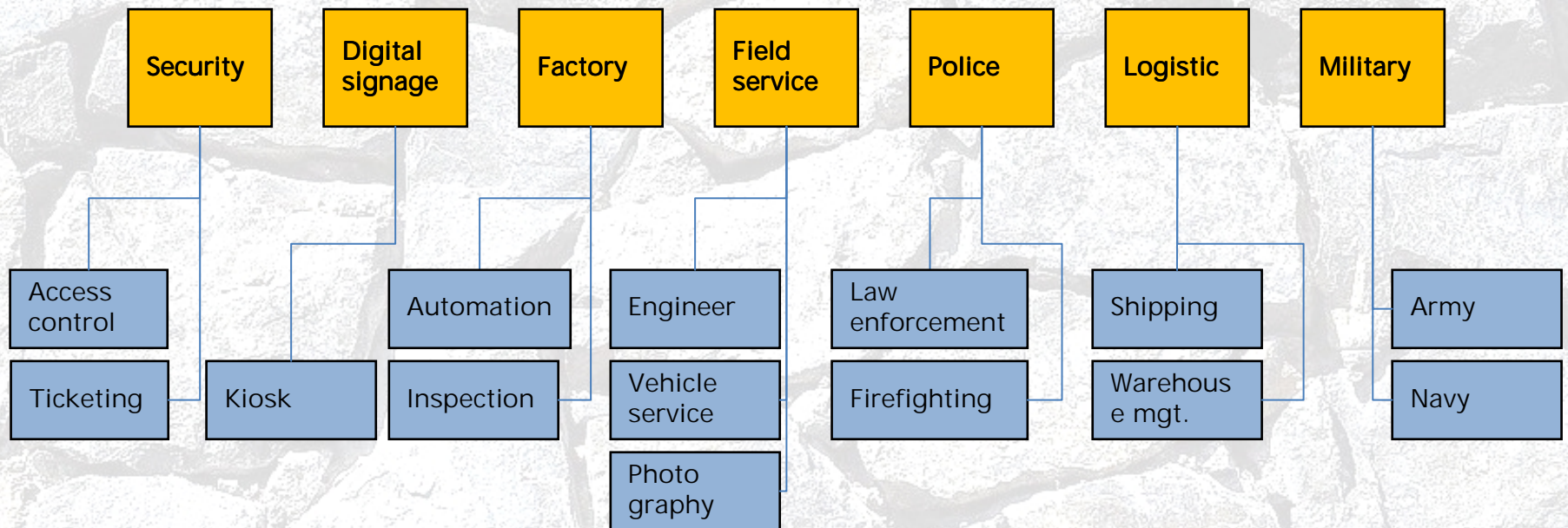
- Harsh, outdoor application
- Water and dustproof
- Shock, vibration and drop resistant



Business ruggedized

- Stress resistant magnesium alloy case
- Water resistant keyboard
- Easy portability

T89 Product Applications





Automation control



Transportation or
Ticketing



Environmental inspection



Mobile workers



Police or Security



Digital Signage, Private Access control ...



Fields services



Logistic or Shipping

Features

- Intel® Atom (Menlow Z520/530/540/550) lowest power platform
- IP54 toughness & security, weight <1.5kg
- Versatile Industrial applications: RFID/BarCode Reader
- Efficient operating design
- Easy portability
- Expansibility



Intel® Atom Platform

Intel Atom (Menlow) micro-architecture & 45nm process – Intel's Lowest Power CPU



Key components support 5+2 years product life cycle



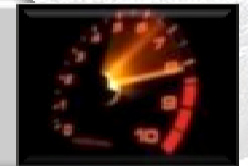
Ultra low power consumption 2~2.2 Watts for longer battery hours



Fanless design for noise free and IP54 chassis



Improved processor & graphics performance; Hardware accelerated full HD video decode



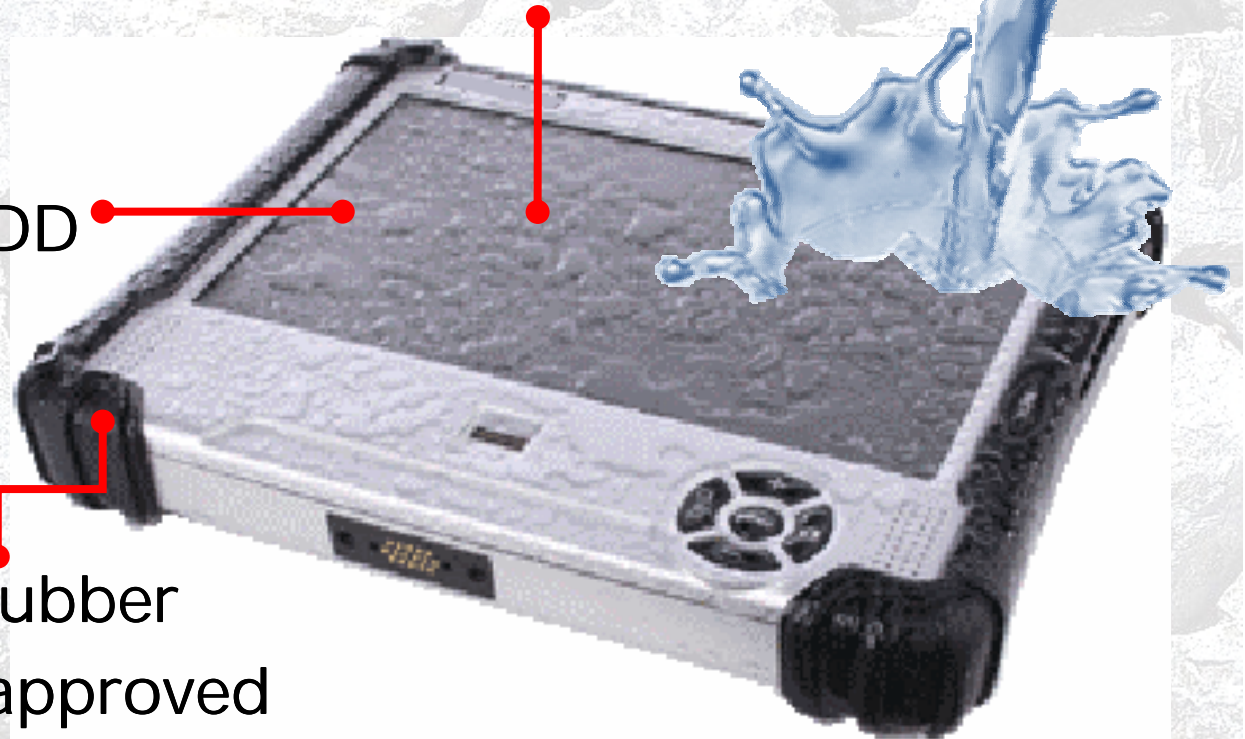
Toughness & Security

IP54

Water and dust proof
Magnesium alloy chassis

G-sensor &
Shock-mounted HDD

Shock-absorbing rubber
120 cm (4 ft) drop approved



Weight less than 1.5kg (3.3lbs)

Toughness & Security

Sunlight readable display
with 350 nits LED B/L panel
& Anti-reflection



0-40°C operating temperature



Day to night
10 hours battery life



Versatile Application Capability

10/100M Ethernet

USB 2.0

✓ RFID / 2D Barcode reader



DC in
USB 2.0
Kensington lock



✓ Fingerprint reader
✓ GPS module
WLAN/BT module



Headphone jack
VGA output
ExpressCard/34
6-in-1 card reader

Efficient Operating Design

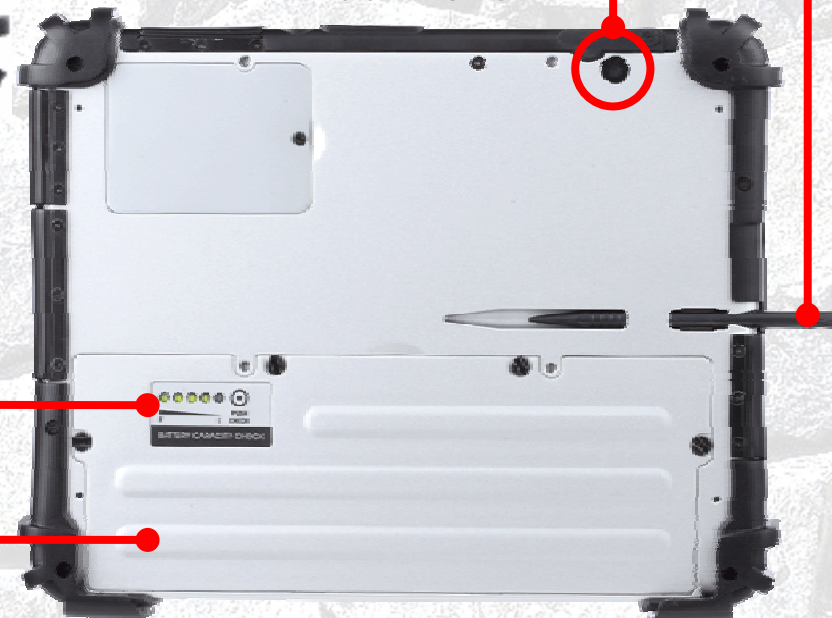


LED backlight with touch screen

5-directional buttons

2MP image camera

Stylus



Battery gas gauge indicator

Hot swappable battery
(within 5 min.)

Easy Portability

Optional
shoulder strap



Optional
hand strap

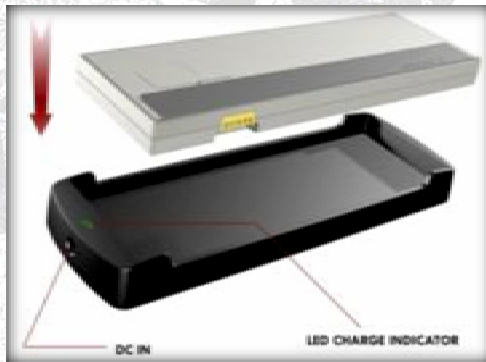


Lightweight
1.5 kg
with battery

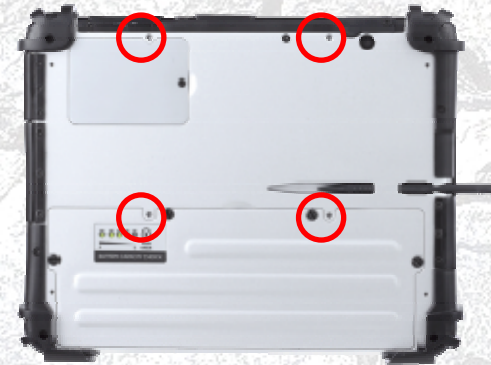


Expansibility

6600 mAh Li-Polymer
Battery charger



Standard VESA 100
mounting



Non-stop operation



Hot swappable battery for
replacement within 5 min.

16 pin docking I/F



Capable of future extension for
power charge and two USB ports

DreaMbook T89 Specification

Model	T890M
Processor	Intel® Atom Z520/Z530/Z540(1.33G/1.6G/1.86GHz, FSB 533 MHz)
Core Logic	Intel® US15W chipset
Display	8.9" WSVGA (1024X600) TFT LCD touch panel (with Stylus pen) LED backlight sunlight readable, brightness at least 350nits
Memory	64-bit wide DDR2 data channel one 200 pins SODIMM socket, supporting DDR2 533 Expandable memory up to <i>1GB/ 2GB</i> , depends on memory module for factory option
Video	Intel® US15W integrated Intel® Graphic Media Accelerator 500 2M pixels video camera module with USB interface
BIOS	one 8Mb SPI Flash ROM Phoenix BIOS
Storage	Shock mounted HDD SATA 2.5" or SATA SSD (SLC) for factory option
G-Sensor	HDD drop protection
Audio	Intel® High Definition Audio (Intel® HD Audio) Built in internal microphone Built in two speakers, 1.5W
Button keys	5 direction key buttons (camera, Zoom/page, up, down, Menu) Barcode Reader button

I/O ports	two USB 2.0 Ports one VGA output port (RGB) one Headphone jack one Internal Microphone one Express card 34 Slot one Card Reader one RJ-45 jack Docking connector DC-in jack
Card Reader	Intel® US15W integrated 6-in-1 card support (SD/ Mini-SD/ <i>SDIO</i> / MMC/ RSMCMC)
Communication	10M/100M Base-TX Ethernet on board Bluetooth V2.1 module Wireless 802.11b+g Mini-card module with USB interface GPS Module HF RFID or 2D Barcode Reader (compatible 1D)
Power Management	Supporting ACPI v3.0 compatible Supporting suspend to RAM (S3) Supporting suspend to disk (S4) Supporting soft off (S5) Battery low suspend Wake on LAN (S3)
Power Supply	Full Range AC adapter 30W AC in 100~240V, 50~60Hz, DC output 19V 1.58A Li-Polymer 6600mAh battery pack Energy Star 4.0 Hot swap design Gas gauge indicators
Security	BIOS password Kensington® Lock Fingerprint

OS	Windows Vista home basic (32bits) Windows XP (32bits)
S/W Certificate	Windows Vista home basic (32bits) Logo Windows XP (32bits)
Environmental spec	Temperature Operating: 0°C ~ 40°C Non-Operating: -20°C ~ 60°C Relative Humidity Operating: 20% ~ 80% Non-Operating: 10% ~ 90%
Dimension& Weight	239(W)X190(D)X30(H) mm Weight: around 1.5kg (with battery)
Indicators	Power/ Suspend, Battery, HDD Battery gas gauge indicator
EMC & Safety Certificate	EMC :FCC Class B, CE, VCCI Safety : cTUVus, TUV, CB IP54 compatible dropping resistant from 120cm
Accessories	USB to RS232 Cable input:12V~24Vdc, output:19V car adapter, 60W hand carry belt
Factory option	GPS module Bluetooth v2.1 module HF RFID 2D Barcode Reader

RF reader support ISO-15693 RFID tags

Tag vendor	Model
TI	Tag-it HF-I PLUS
TI	Tag-it HF-I PRO/Standard
Infineon	My-d
Philips	I-Code2

Support 1D/2D Barcode types



12345ABCDE

Code39
1-dimensional



PDF-417
2-dimensional



QR code
2-dimensional



DataMatrix
2-dimensional

Code39 (5mm)

PDF-417 (5mm)

QR code (10mm)

DataMatrix (10mm)

Code39 (10mm)

PDF-417 (10mm)

QR code (15mm)

DataMatrix (15mm)

Supported Processors

- 1.33/1.6 GHz/533MHz/2W/512K
- 2.0/1.86 GHz/533MHz/2.4W/512K

SCH

- Single chip SCH (GMCH + ICH)

Memory

- Single Channel
- DDR2 533
- 2GB Max Memory

Graphics

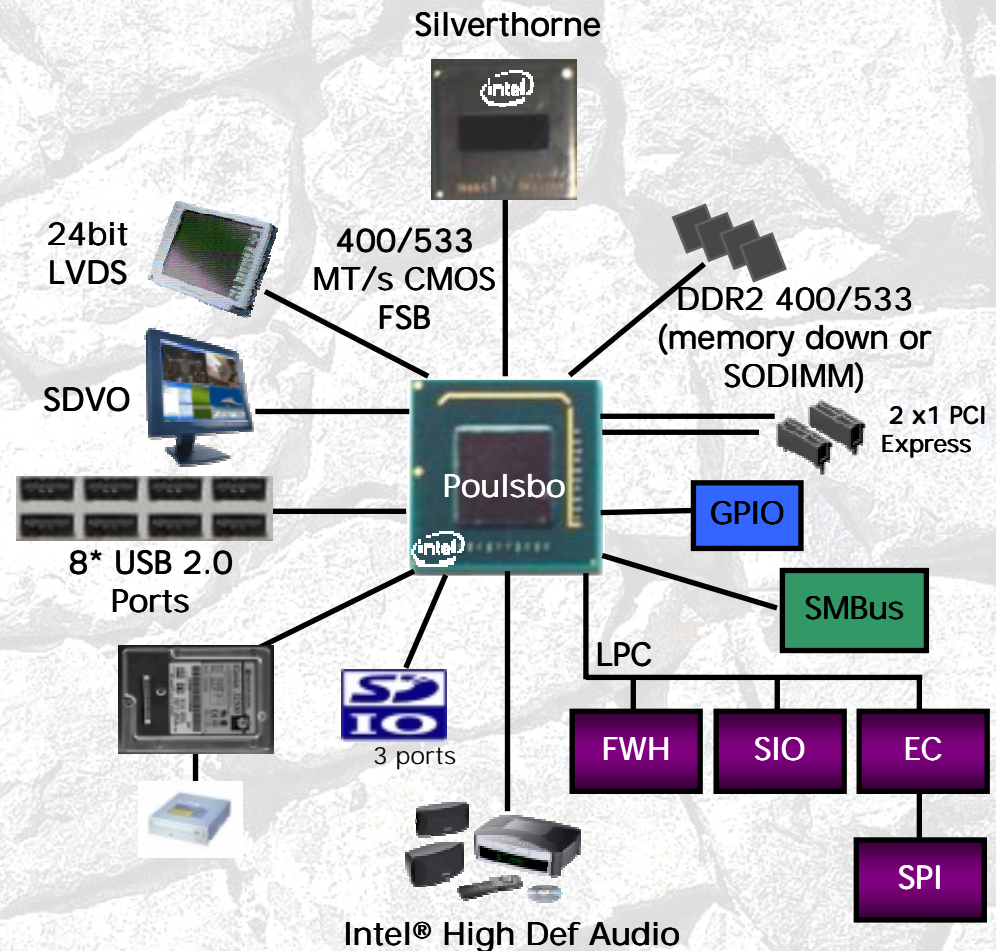
- Low Power Graphics Core
- Dual Independent Displays
- Internal LVDS

Video

- HW HD/SD Video Decode
- SDVO is the 2nd Display Port

IO Support

- 2-(x8) 1-(x4) - SDIO / MMC
- 1 PATA (Master / Slave)
- 2 -(x1) PCIe Ports
- 8 USB (1 client)
- Intel® High Definition Audio

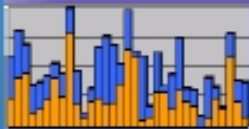


Intel® Atom Processor Z5xx series Performance Features



533MHz & 400MHz Front Side Bus

- Faster pathway between the CPU and memory offers higher performance



Hyper-Threading Technology¹

- Support for multithreaded apps which enables increased performance and increased system responsiveness

SSE3

Intel® Digital Media

- SSE3 adds 13 new instructions over SSE2
- Instructions targeted to improve thread synchronization and media applications
- Enhanced performance on Floating Point intensive apps like music, gaming and digital photography



L2 Data Prefetcher

- More efficient speculation and loading of data into L2 cache likely to be requested by CPU offers higher performance

Intel® System Controller Hub

Manufacturing & Package Technology

- 22 x 22 mm single chip solution; 32% footprint reduction from previous generation
- Advanced thin core package¹ technology enables 2.0 mm Z-height
- Lead & Halogen Free



Intel SCH (Poulsbo)



Power Optimized to Enhance Battery Life

- Ultra Low power 3D Graphics and HD video decode
- Intel® Display Power Saving Technology
- Intel® Rapid Memory Power Management
- Supports CMOS Front Side Bus Implementation
- Supports CPU Deep Power Down State (C6)

Rich Feature Set Ideal for Handheld Devices

- Hardware accelerated full HD video decode
 - MPEG2, MPEG4, H.264, WMV9/VC1
- Supports external display at HDTV resolution¹
- 8 USB 2.0 Host Ports, 1 USB 2.0 Client Port^{2,3}
- SDVO: 1280 x 1024 / HDTV 720p/1080p
- LVDS: 1366 x 768 (24bit color)
- 3 SDIO/MMC ports
- 2 PCI Express x1 ports
- DDR2 400/533 MHz, 2GB Max.
- Intel® High Definition Audio
- >4GB SDIO Support
- IDE PATA 100

1. Dependent on the SKU

2. 1 of the 8 USB Host ports can be configured as a Client port

3. USB Ports with Integrated transceiver

