

# **Racer 2.0**

# **Neptune 2.0**



Eurocom's new Mobile Workstations

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# New Models

**RELEASE DATE:** April 29<sup>th</sup> 2012

## Racer 2.0

P150EM – User-configurable backlit keyboard

P151EM Black Edition – No keyboard backlighting

## Neptune 2.0

P170EM – User configurable backlit keyboard

P170EM3 – NVIDIA 3D ready – backlit keyboard

# New Features

## Intel Chief River Platform

Intel® Ivy Bridge processors – up to 3920XM

Mobile Intel® HM77 Express chipset

Supports NVIDIA® Optimus Switchable GPU technology

## 64GB RAM Support

4 RAM sockets – dual channel DDR3 1333MHz/1600MHz

2 DIMMS per channel with quad core processors only

## Backlit keyboards

Controllable via Control Center software

Seven selectable colours

Multiple lighting options - e.g. wave pattern, breathing, flashing

# New Features

## mSATA support

P150EM – mSATA 6Gbp/s

P170EM – mSATA 3Gbp/s

## UEFI BIOS – Supports extensions to enable new Intel technologies

Intel® Rapid Start

Intel® Anti-Theft

Intel® Smart Response

Intel® Rapid Storage

Intel® Identity Protection

# Key Technologies – Ivy Bridge processors

## Ivy Bridge

22nm evolution of acclaimed Sandy Bridge micro-architecture

First processors to use Intel's new tri-gate(3D) transistors

20% performance increase over Sandy Bridge

## Intel® HD 4000 Graphics

60% performance increase over HD 3000 series

DirectX 11 support

Dynamic sharing with system RAM – up to 1.7GB

# Key Technologies – Ivy Bridge processors

## Tri-gate (3D) transistors

New Intel® technology, developed for 22nm Ivy Bridge processors

Allows for increased transistor density

Faster on/off switch states

Improved current control (less drain)

## Net benefit

Increased performance

Improved energy efficiency

Conventional Planar Transistor

Tri-gate Transistor



Image courtesy of Intel® Corp.

# Key Technologies – Chipset

**Mobile Intel® HM77 Express Chipset** – codename Panther Point

Ivy Bridge & Sandy Bridge processor support

UEFI

Native USB 3.0 support

Two SATA 6Gbp/s ports

mSATA support

NVIDIA Optimus Switchable GPU technology

# Key Technologies – Chipset

## Intel® Rapid Start Technology

Resume system state in 5-6 seconds from **hibernate**

Remembers computer state with zero power

Requires SSD

## Intel® Rapid Storage & Smart Response Technology

Permits use of an SSD drive as a cache drive

Delivers SSD-like performance with capacity of HDD

Ideal for use with a factory option mSATA drive

# Key Technologies – Chipset

## Intel® Anti-Theft Technology

Remote-disable over 3G, regardless of OS state or Internet connection

GPS tracking with 3G module

Failure to check-in or multiple failed logins can trigger lockdown

## Intel® Identity Protection Technology

Protects against identity theft

Uses hardware tokens to authenticate access to online accounts

Can be done in parallel with most existing two-factor authentication solutions

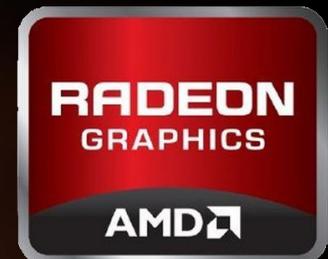
# Key Technologies – VGA

Support for NVIDIA® 600 series (Kepler) and AMD® Radeon Mobility HD7000 series (Wimbleton)

MXM 3.0B standard

100W max – planned support for 130W

Base configuration includes NVIDIA GTX 670M 1.5GB GDDR5 VGA card



# Key Technologies – NVIDIA® Optimus



## NVIDIA® Optimus Switchable GPU Technology

Seamless automatic switching between CPU IGP and MXM 3.0b GPU

Performance of GPU only when required

## Net benefits

Maximum battery life

Reduced AC energy usage

Reduced heat generation

Quieter operation

## NVIDIA® Optimus

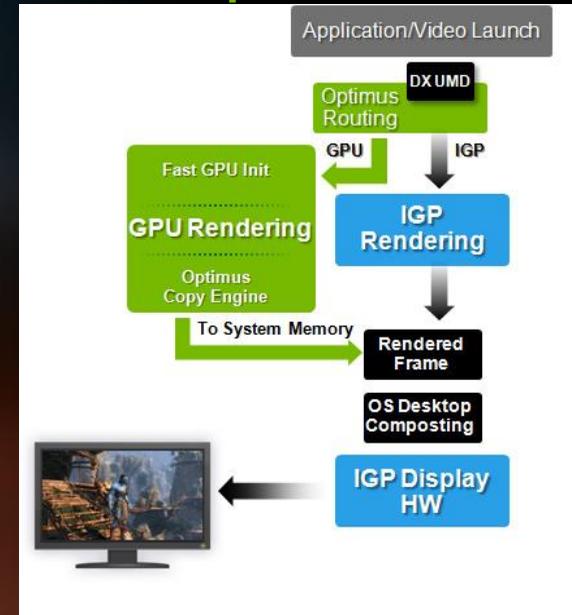


Image courtesy of NVIDIA®

# Key Technologies - mSATA

## mSATA

Small footprint, SATA SSD

Available as a factory option – Intel 310 series (40GB/80GB)

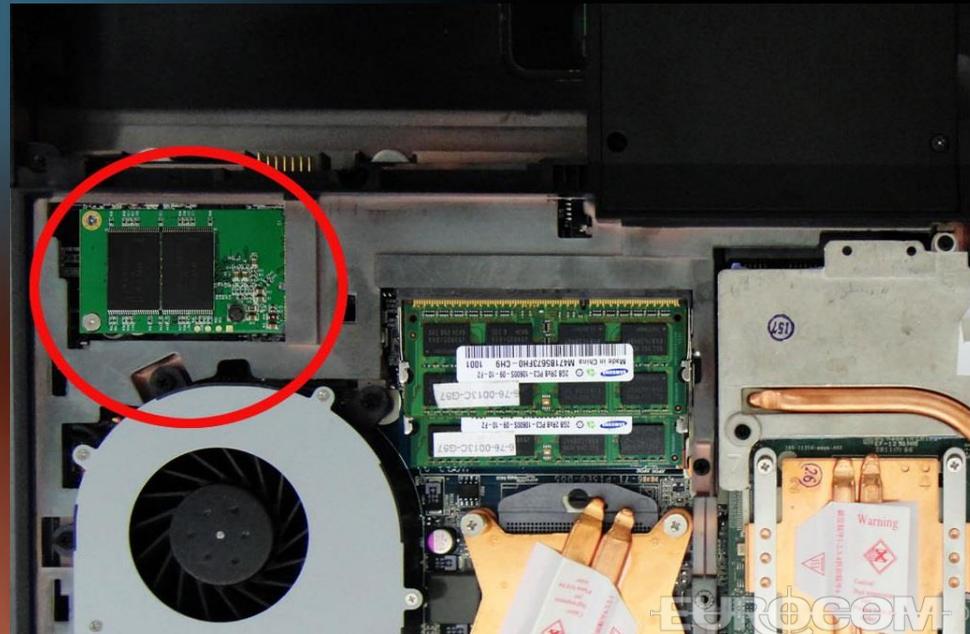
Ready for Intel® Rapid Start – fast system resume

Ready for Intel® Smart Response – SSD caching

## Net benefits

Excellent OS or application drive

Performance boost when used as HDD cache



# Key Technologies – Backlit Keyboard

## Backlit Keyboard

Adjustable brightness

Seven selectable colours & patterns

Assign different colours to sections of keyboard

User-friendly interface

Hot-keys also available



# Design Principles

Long lifespan

Fully upgradeable

Configurable for variety of roles

Heavy-duty - designed for occasional abuse

Easy deployment – single image across all units

Low TCO (hardware, software & support costs)

# Product Roles

## 1. High performance Mobile Workstation

Quad core Intel Core i7 processors

Support for multiple hard drives

## 2. Portable Gaming notebook

Up to NVIDIA® GTX 680M or AMD Radeon Mobility 7970M

Up to Intel Core™ i7 3920XM processor

## 3. Portable Engineering Workstation (Quadro VGA)

Up to NVIDIA® Quadro 5010M

Up to 64GB RAM

# Ports List

3x USB 3.0 (1x powered USB – AC/DC)

1x USB 2.0 port

1x eSATAp port (USB 3.0 Combo – powered)

1x Mini IEEE 1394a port

1x DisplayPort 1.1a

1x DVI-I port (Single Link)

1x HDMI 1.4a output port (w/ HDCP)

1x Headphone jack

1x S/PDIF output jack

1x Line-in jack

1x RJ-45 LAN port

1x DC-in jack