Motorola MC55
Enterprise Digital Assistant (EDA)

A new level of flexibility and functionality for managers and task workers

FEATURES

Sleek yet rugged pocket-sized lightweight form factor
Built for year round use in nearly any environment, with IP54 sealing and the ability to survive a 4 ft./1.2 m drop to concrete

Powerful microprocessor designed for mobility: XScale PXA270 @ 520 MHz
Desktop-like performance with lower power requirements

3.5 inch color high definition QVGA display (320 x 240)
Easy to view in virtually any lighting

True pocket-sized rugged handheld computer with advanced voice and data

The Motorola MC55 brings a new level of functionality and flexibility to pocket-sized mobile devices. As the smallest and lightest Motorola rugged EDA, the MC55 packs the power of a cell phone, bar code scanner, camera, walkie talkie and mobile computer into a robust business class device with true consumer styling and ergonomics — and is designed to meet mobile worker, business application and IT requirements. This highly flexible product family provides mobile workers both inside the enterprise campus and out in the field with voice and data services needed to streamline tasks, increase productivity as well as improve customer response times — and customer service levels. A broad array of accessories enables easy customization

of the MC55 to meet the unique needs of your business applications. And with enterprise durability, manageability, security and scalability, Motorola's MC55 easily meets the most demanding IT policies and mandates.

One family of devices for different workers… and different tasks…in different environments

This single device is available in primary variants and many configurations to best meet the requirements for a diverse set of mobile workers. Designed for workers inside the four walls, the MC5590 offers wireless LAN (WLAN) and Bluetooth connectivity for modems and printers — ideal for healthcare workers in a hospital, retail managers, retail mobile point of sale and more. The MC5574 is designed for workers outside your four walls — including field service, government and public safety workers.

The MC5574 offers WWAN, WLAN and Bluetooth connectivity that meets the needs of workers who spend time inside the four walls as well as out in the field. In addition, a multitude of configurations for each model allows enterprises to purchase the right feature set for different types of workers instead of all features for all workers, reducing capital expenditures and the overall cost of your mobility solution.

Choose the data capture options you need

Automate, enrich and error proof data collection in various areas of your business with a full suite of highly advanced data capture options, providing the flexibility to match the right options to the right workers. For workers who only need bar code scanning, choose a 1D laser scanner for environments that utilize only 1D bar codes or a 2D imager to enable the capture of 1D and 2D bar codes. For workers who need to capture images as well as bar codes, a 2 megapixel autofocus high resolution color camera with either a 1D laser scanner or 2D imager allows the easy capture of bar codes and signatures as well as photographs for proof of condition and more.

Maximum voice quality…and functionality

Designed from the ground up to support voice as well as data, the Motorola MC55 offers a superior voice experience. Functionality includes full duplex voice, push-to-talk (PTT) over the WWAN and WLAN, enabling one-to-one calls as well as walkie-talkie style instant communications. Additionally, Bluetooth headset, handset and speakerphone modes provide workers with the convenience and flexibility to meet the needs of the job…and the moment.

Robust locationing with best-in-class GPS

Chosen for its superior sensitivity and tracking capabilities, the integrated high performance SiRFstarIII GSC3f/LP chipset enables a multitude of real-time location based applications, from directions for drivers to real-time fleet location for dispatchers. The chipset delivers expanded coverage for GPS applications by enabling the rapid and highly accurate capture of signals in some of the most challenging environments, including urban canyons and areas where foliage is very dense. And the low-power chipset delivers top-notch accuracy with minimal power requirements, conserving battery power to help provide end-users with location-based services.

Easily customize to meet your specific application requirements

A complete line of accessories enables you to tailor the MC55 to best meet the needs of your applications and your mobile workers. A broad range of keypads ensures easy operation for a wide variety of applications — choose numeric keypads for workers who primarily utilize the MC55 as a smart phone and for very simple data entry, while an array of alphanumeric keypads enables easy entry of more sophisticated data. Magnetic stripe readers provide on the spot split second processing of credit and loyalty cards — ideal in retail as well as field service and sales operations. And IEEE 1725 compliance for the MC55 line of accessories brings a new level of reliability and safety to the entire MC55 system.

Enterprise durability, manageability, security and scalability

When it comes to meeting enterprise IT criteria, the Motorola MC55 shines. The sleek consumer-styled device delivers true enterprise class durability.

The MC55 Accessory Family: A wide variety of accessories allows you to easily customize the Motorola MC55 to best meet the needs of your applications and your workers — from 4-slot and single slot cradles to battery chargers and more.

Motorola's industry-leading drop and tumble testing combines with IP54 sealing to ensure reliable operation in spite of the inevitable drops, bumps and exposure to the elements. Compatibility with Motorola's Mobility Software Suite provides extraordinary centralized control of all your MC55 devices, offering remote staging, provisioning, monitoring and troubleshooting of devices, the ability to secure data on the devices as well as during transmission and much more. Support for the latest in wireless security standards provides maximum security for your wireless devices as well as your wireless and wired networks. And you can easily add devices as your workforce expands or to mobilize applications in other areas of your business, providing the scalability to meet growing and changing business needs.

Superior return on investment (ROI)

With a rapid ROI, the MC55 is easy to cost-justify. This single device replaces as many as five business devices, substantially reducing capital and operational expenses — there are simply fewer devices to purchase and manage. Designed for a three to five year lifecycle, the MC55 offers a lifespan two to three times that of the average consumer-grade PDA, preserving your hardware as well as associated application investments. The ability to meet the needs of many different types of workers with a single device reduces the load on your IT staff — there are fewer devices and operating systems to understand, manage and support. And Voice over WLAN (VoWLAN) support provides cost-effective voice services inside the enterprise walls and in hot spots.

A platform you can count on today… and tomorrow

The Motorola MC55 offers the processing power and memory architecture required to deliver superior performance for a wide variety of applications

— including voice, data and GPS. Mobilizing your business applications and integration with your existing network infrastructure is easy with the latest industry standard mobile operating system — Microsoft® Windows Mobile® 6.1. And since Motorola mobile computers share a common technology platform, applications developed for other Motorola mobile devices are easily ported to the MC55, improving deployment times and maximizing the return on investment for existing applications.

The Motorola end-to-end advantage

When you choose the Motorola MC55, you enjoy the advantages of a world-class partner channel, world-class management solutions and world-class services. Our award-winning partner ecosystem offers a best-in-class broad set of ready-to-go and custom applications for the MC55, minimizing deployment time and cost. To help you protect your investment and maintain peak performance, Motorola recommends Service from the Start with Comprehensive Coverage for the MC55. This unique service sets the standard for post-deployment support by including normal wear and tear, as well as coverage for internal and external components damaged through accidental breakage — significantly reducing your unforeseen repair expenses. In addition, this offer also extends coverage to the stylus, screen protector and hand strap that ship together with the MC55 mobile computers for no additional charge, making this service truly "comprehensive".

For more information on how the MC55 can empower your workers with mobility, please visit us on the web at www.motorola.com/MC55 or access our global contact directory at www.motorola.com/enterprisemobility/contactus

High quality speakerphone, microphone and transducer
Superior voice quality and performance

Multiple voice modes: handset, speakerphone and Bluetooth headset
Flexibility to use the right mode at the right time

Multi-mode data capture: 1D/2D bar code scanning plus 2 megapixel auto-focus flash-enabled optional color camera with decode capability
Ability to capture high quality pictures, documents and signatures as well as 1D and 2D barcodes improves workforce automation; increases productivity and reduces data errors

Mobility Platform Architecture (MPA)
Enables easy and cost-effective porting of applications from many other Motorola mobile computers

IEEE 1725 compliance for the entire MC55 system — including all models, all batteries and all power-related accessories (such as cradles and charging cables)
Mitigates battery system failure, bringing a new level of reliability, quality and safety to the entire MC55 system

Multiple keyboard options: numeric, QWERTY, QWERTZ, AZERTY and NAV PIM (MC5590 only)
Flexibility to meet diverse user and application needs

User accessible microSD card slot
Provides additional memory and expandable functionality

128MB RAM/ 256MB FLASH
Provides memory space required to enable robust performance for database applications

The comprehensive line of accessories also includes holsters and a wide variety of cables, such as vehicle charging cables and line cords for use around the world. For a complete list of accessories, refer to the MC55 Accessories Guide, which can be found on the Motorola website.

MC55 Specifications

	MC5590 (WLAN/PAN)	MC5574 (WWAN/WLAN/PAN)
Physical Characteristics		
Dimensions:	5.78 in. L x 3.03 in. W x 1.06 in. D/ 14.7 cm L x 7.7 cm W x 2.6 cm D (without antenna)	6.0 in. L x 3.03 in. W x 1.10 in. D/ 15.2 cm L x 7.7 cm W x 2.7 cm D (with antenna)
Weight:	11.1 oz./315 g (with rechargeable 2400 mAh Lithium Ion battery)	11.8 oz./336 g (with rechargeable 2400 mAh Lithium Ion battery)
Display:	Color 3.5 in. QVGA (320x240) Touch Panel	Color 3.5 in. QVGA (320x240) Touch Panel
Touch Panel:	Glass analog resistive touch	Glass analog resistive touch
Backlight:	LED backlight	LED backlight
Standard Battery:	Rechargeable Lithium Ion 3.7V, 2400 mAh Smart Battery	Rechargeable Lithium Ion 3.7V, 2400 mAh Smart Battery
Extended Battery:	Rechargeable Lithium Ion 3.7V, 3600 mAh Smart Battery	Rechargeable Lithium Ion 3.7V, 3600 mAh Smart Battery
Expansion Slot:	microSD slot (maximum 8GB with BSP 28)	microSD slot (maximum 8GB with BSP 28)
Communication Interface:	USB 1.1 Host and Client	USB 1.1 Host and Client
Notification:	Audible tone plus multi-color LEDs	Audible tone plus multi-color LEDs
Keypad Options:	Numeric, QWERTY, AZERTY, QWERTZ and NAV PIM	Numeric, QWERTY, AZERTY and QWERTZ
Audio:	Speaker, microphone and Bluetooth headset	Speaker, microphone and Bluetooth headset
Performance Characteristics		
CPU:	XScale™ PXA 270 520 MHz processor	XScale™ PXA 270 520 MHz processor
Operating System:	Microsoft® Windows Mobile® 6.1 Classic	Microsoft® Windows Mobile® 6.1 Professional
Memory:	128 MB SDRAM/256 MB Flash	128 MB SDRAM/256 MB Flash
User Environment		
Operating Temperature:	14° F to 122° F / -10° C to 50° C	14° F to 122° F /-10° C to 50° C
Storage Temperature:	-40° F to 158° F / -40° C to 70° C	-40° F to 158° F /-40° C to 70° C
Humidity:	95% non-condensing	95% non-condensing
Drop Specification:	4 ft./1.2 m drop to concrete, 2 drops per 6 sides over the operating temperature range	4 ft./1.2 m drop to concrete, 2 drops per 6 sides over the operating temperature range
Tumble Specification:	250 1.6 ft./.5 m tumbles (equivalent to 500 drops)	250 1.6 ft./.5 m tumbles (equivalent to 500 drops)
Sealing:	IP54	IP54
Light Immunity:	Incandescent: 450 ft. candles Sunlight: 8000 ft. candles Fluorescent: 450 ft. candles	Incandescent: 450 ft. candles Sunlight: 8000 ft. candles Fluorescent: 450 ft. candles
Electrostatic Discharge (ESD);	12KV	12KV
Battery Performance		
Standby Time:	100 Hours	100 Hours
Talk Time:	6 Hours	6 Hours
User Profiles:	8 Hours	8 Hours
Data Capture Options		
Options:	Four configurations available: 1D laser scanner; 2D imager; Camera + 1D laser; Camera + 2D imager	Four configurations available: 1D laser scanner; 2D imager; Camera + 1D laser; Camera + 2D imager
Color Camera		
Resolution:	2 megapixel	2 megapixel
Illumination:	User controllable flash	User controllable flash
Lens:	Auto focus	Auto focus

*Note: All models may not be available in all geographies. To determine which models are available in your area, contact your local Motorola representative.

	MC5590 (WLAN/PAN)	MC5574 (WWAN/WLAN/PAN)
1D Laser Scanner (SE950)		
Range on 100% UPCA:	24 in./60 cm	24 in./60 cm
Resolution:	4 Mil minimum element width	4 Mil minimum element width
Roll:	±35° from vertical	±35° from vertical
Pitch Angle:	± 65° from normal	± 65° from normal
Skew Tolerance:	± 50° from normal	± 50° from normal
Ambient Light Immunity:	10,000 ft. candles/107,640 lux	10,000 ft. candles/107,640 lux
Scan Rate:	104 (+/- 12) scans/sec (bi-directional)	104 (+/- 12) scans/sec (bi-directional)
Scan Angle:	47° ± 3° default; 35° ± 3° reduced	47° ± 3° default; 35° ± 3° reduced
2D Imager Engine (SE4400)		
Optical Resolution:	640 H x 480 V pixels (gray scale)	640 H x 480 V pixels (gray scale)
Roll:	360°	360°
Pitch Angle:	± 60° from normal	± 60° from normal
Skew Tolerance:	± 50° from normal	± 50° from normal
Ambient Light:	Total darkness to 9,000 ft. candles/96,900 lux	Total darkness to 9,000 ft. candles/96,900 lux
Range on 100% UPCA:	16 in./40 cm	16 in./40 cm
Aiming Element (VLD):	650 nm ± 5 nm	650 nm ± 5 nm
Illumination Element (LED):	635 nm ± 20 nm	635 nm ± 20 nm
Field of View:	Horizontal: 32.2°; Vertical: 24.5°	Horizontal: 32.2°; Vertical: 24.5°
Wireless WAN Voice and Data Communications		
Radio:	N/A	GSM GPRS EDGE 2.5G
Frequency Band:	N/A	Quad Band (850, 900, 1800 and 1900 MHz)
Antenna:	N/A	External
Integrated GPS		
GPS:	N/A	Integrated Assisted-GPS (A-GPS); SiRFstarIII GSC3f/LP chipset
Wireless LAN Voice and Data Communications		
Radio:	Tri-mode IEEE® 802.11a/b/g	IEEE® 802.11b/g
Security:	WEP (40 or 128 bit), TKIP, AES, WPA (Personal or Enterprise), WPA2 (Personal or Enterprise), 802.1x, EAP-TLS, TTLS (CHAP, MS-CHAP, MS-CHAPv2, PAP or MD5), PEAP (TLS, MS-CHAPv2, EAP-GTC), LEAP, EAP-FAST (TLS, MS-CHAPv2, EAP-GTC)	WEP (40 or 128 bit), TKIP, AES, WPA (Personal or Enterprise), WPA2 (Personal or Enterprise), 802.1x, EAP-TLS, TTLS (CHAP, MS-CHAP, MS-CHAPv2, PAP or MD5), PEAP (TLS, MS-CHAPv2, EAP-GTC), LEAP, EAP-FAST (TLS, MS-CHAPv2, EAP-GTC)
Antenna:	Internal	Internal
Data Rates Supported:	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps
Operating Channels:	Chan 34-165 (5040 – 5825 MHz), Chan 1-13 (2412-2472 MHz), Chan 14 (2484 MHz) Japan only; actual operating channels/frequencies depend on regulatory rules and certification agency	Chan 1-13 (2412-2472 MHz), Chan 14 (2484 MHz) Japan only; actual operating channels/frequencies depend on regulatory rules and certification agency
Voice Communication:	Voice-over-IP ready, Wi-Fi™-certified, IEEE 802.11a/b/g direct sequence wireless LAN, Wi-Fi Multimedia™ (WMM), Motorola Voice Quality Manager (VQM), Motorola TEAM Express 1.0 voice client (push-to-talk)	Voice-over-IP ready, Wi-Fi™-certified, IEEE 802.11a/b/g direct sequence wireless LAN, Wi-Fi Multimedia™ (WMM), Motorola Voice Quality Manager (VQM)
Wireless PAN Data and Voice Communications		
Bluetooth:	Class II, v 2.0 Enhanced Data Rate (EDR); integrated antenna	Class II, v 2.0 Enhanced Data Rate (EDR); integrated antenna

	MC5590 (WLAN/PAN)	MC5574 (WWAN/WLAN/PAN)
Peripherals and Accessories*		
Communication and Charging Cables:	Charge only cable, auto charge cable, USB charge/sync cable	Charge only cable, auto charge cable, USB charge/sync cable
Battery Chargers/Cradles:	4-slot battery charger; 4-slot Ethernet cradle; 4-slot charge only cradle; single slot USB cradle; vehicle holder using auto charge cable; vehicle cradle with charging capabilities	4-slot battery charger; 4-slot Ethernet cradle; 4-slot charge only cradle; single slot USB cradle; vehicle holder using auto charge cable; vehicle cradle with charging capabilities
Vertical Specific Attachments:**	Snap-on magnetic stripe reader	Snap-on magnetic stripe reader
Soft Goods:	Rigid and soft case holsters	Rigid and soft case holsters
Regulatory		
Electrical Safety:	Certified to UL/cUL 60950-1, IEC / EN60950-1	Certified to UL/cUL 60950-1, IEC / EN60950-1
Environmental:	RoHS-compliant	RoHS-compliant
WLAN and Bluetooth (PAN):	**USA**: FCC Part 15.247, 15.407 **Canada**: RSS-210, RSS 310 **EU**: EN 300 328, EN 300 440-2, EN 301 893 **Japan**: ARIB STD-T33, ARIB STD-T66, ARIB STD-T70 & T71 **Australia**: AS/NZS 4268	**USA**: FCC Part 15.247 **Canada**: RSS-210, RSS 310 **EU**: EN 300 328, EN 300 440-2 **Australia**: AS/NZS 4268
Wireless Wide Area Network:	N/A	Quad Band GSM/ EDGE **Global**: 3GPP TS 51.010, GCF approved module **USA**: FCC Part 22, Part 24 **Canada**: RSS-132, RSS-133 **EU**: EN301 511 **Australia**: AS/ACIF S024.1 & 3
RF Exposure:	**USA**: FCC Part 2, FCC OET Bulletin 65 Supplement C **Canada**: RSS-102 **EU**: EN 50392 **Australia**: Radio communications Standard 2003	**USA**: FCC Part 2, FCC OET Bulletin 65 Supplement C **Canada**: RSS-102 **EU**: EN 50360 **Australia**: Radio communications Standard 2003
EMI/RFI:	**North America**: FCC Part 15, Class B **Canada**: ICES 003 Class B **EU**: EN55022 Class B, EN 301 489-1, EN 301 489-17, EN 301 489-19, EN 60601-1-2 **Australia**: AS/NZS CISPRA-22	**North America**: FCC Part 15, Class B **Canada**: ICES 003 Class B **EU**: EN55022 Class B, EN 301 489-1, EN 301 489-7, EN 301 489-17, EN 301 489-19, EN 60601-1-2 **Australia**: AS/NZS CISPRA-22
Laser Safety:	IEC/Class 2/FDA II in accordance with IEC60825-1/EN 60825-1	IEC/Class 2/FDA II in accordance with IEC60825-1/EN 60825-1

Warranty

The MC55 is warranted against defects in workmanship and materials for a period of 12 months from date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions

Recommended Services

Customer Services: Service from the Start with Comprehensive Coverage

* Visit www.motorola.com/mc55 for a complete list of available peripherals and accessories as well as ready-to-deploy enterprise applications.

** Available Q3 2009

SPECIFICATION SHEET

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