CHAINWAY ®

C71
Mobile Computer
Optical Fingerprint

Chainway C71 is an Android rugged mobile computer. As a replacement of C70E, it is improved to enable optical fingerprint sensor CBM-E3. C71 is revolutionized to be FIPS 201 compliant, and enable secure data encryption and fake finger detection. With its powerful Octa-core processor and wireless connections such as 4G, Bluetooth and Wi-Fi, fingerprint scanner, barcoding and NFC, you can find this easy-to-deploy device an exceptionally valuable helper to increase working efficiency and productivity. C71 with abundant functions can best satisfy your different industrial needs.

ISO 14001 UCC   ISO 9001 UCC   CE   FC   RoHS

Most Powerful Application Performance
Chainway C71 prides itself on Android 8.1 / 11.0 OS, quad-core processor, and 3GB / 4GB of RAM, 32GB / 64GB of ROM, plus 128GB SD card expansion.

Multiple Data Capture Options
C71 features class-leading 1D/2D barcode scanning and NFC.

4G LTE — Faster Connectivity
With fast and stable 4G, Wi-Fi, Bluetooth connectivity, C71 will never interrupt your work both indoors and outdoors.

Rugged and Compact
With IP65 sealing, workers can still expect reliable performance when they drop it to the concrete carelessly, use it in dusty areas, or even get it wet.

Large Screen & Powerful Battery
It adopts 5.2'' high-resolution IPS screen. It also supports operation with wet hands or gloves. 5000mAh battery allows a full day's non-stop work.

Optical Fingerprint Sensor
C71 can be configured with Optical Morpho CBM-E3 fingerprint module. Running powerful algorithms, it is FIPS 201 PIV, MINEX and STQC compliant with multiple template formats available and capable of fake fingerprint detection. It is also small in size, durable, immune to sunlight and resistant to electro-static discharges, scratches and shocks. All make it to effortlessly capture a clear excellent image of the ridges and valleys of fingers.

Multiple Security Principles
Symmetric and asymmetric keys, random key generator, image and template encryption, and secure channel encryption are available to ensure the communication between C71 and distant / cloud server are protected. Enterprise administrator can easily control right of root or installing some software applications via authorization strategy or other MDM options.

About Chainway

As a leading "Internet of Things" company in China, Shenzhen Chainway Information Technology Co., Ltd is a professional provider of products and solutions of RFID and barcode technology. Founded in 2005, Chainway, a high-tech enterprise, has won several times the title of the Best Provider of RFID Readers. Thousands of clients from over 100 countries have experienced our products in retail, logistics, transportation, healthcare, finance, security and manufacturing, etc. Through our nationwide offices, overseas subsidiary and an extensive partner network, we aim to provide high quality service to our clients.

CHAINWAY®

Fingerprint	1D Barcode	2D Barcode	NFC	4G	WiFi	Bluetooth	GPS	Camera	

Physical Characteristics

Dimensions	164.2*78.8*17.5mm/6.46*3.10*0.69in (the thickest: 31.5mm/1.24in)
Weight	314 g / 11.08 oz.
Display	5.2" IPS FHD 1920x1080
Touch Panel	Corning Gorilla Glass 3, multi-touch panel, gloves and wet hands supported
Power	Main battery: Li-ion, rechargeable, 5000 mAh
	Standby: over 350 hours
	Continuous use: over 12 hours (depending on user environment)
	Charging time: 3-4 hours (with standard adaptor and USB cable)
Expansion Slot	1 slot for SIM card, 1 slot for SIM or TF card
Interfaces	USB 2.0 Type-C, OTG, Type-C headphones supported
Audio	speaker, 2 microphones
Keypad	4 front buttons, 1 side button, 2 scan keys, 1 multifunctional key
Sensors	Gravity sensor, Light Sensor, Proximity Sensor, Vibration Motor

Performance

CPU	Cortex-A53 2.5 / 2.3 GHz Octa-core
RAM+ROM	3GB+32GB / 4GB+64GB
Expansion	Supports up to 128 GB Micro SD card

Developing Environment

Operating System	Android 8.1 / 11.0
SDK	Chainway Development Kit (based on Morpho SDK)
Language	Java
Tool	Eclipse / Android Studio

User Environment

Operating Temp.	14°F to 122°F / -10°C to 50°C
Storage Temp.	-40°F to 158°F / -40°C to 70°C
Humidity	5%RH - 95%RH non condensing
Drop Specification	Multiple 1.8m/5.9ft drops (at least 20 times) to the concrete across the operating temperature range
Tumble Specification	1000 x 0.5m/1.6ft falls at room temperature
Sealing	IP65 dependent
ESD	±15KV air discharge, ±6KV conductive discharge

Communication

Android 8.1

WLAN	IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, internal antenna
WWAN (China)	2G: 900/1800 MHz
	3G: WCDMA: B1,B8
	CDMA2000 EVDO: BC0
	TD-SCDMA: B34,B39
	4G: B1,B3,B5,B8,B34,B38,B39,B40,B41
WWAN (Europe)	2G: 850/900/1800/1900MHz
	3G: B1,B2,B4,B5,B8
	4G: B1,B3,B5,B7,B8,B20,B40

WWAN(America)	2G: 850/900/1800/1900 MHz
	3G: B1,B2,B4,B5,B8
	4G: B2,B4,B7,B12,B17,B25,B66
WWAN (Others)	Depending on the country's ISP
Bluetooth	Bluetooth v2.1+EDR, 3.0+HS, v4.1+HS
GNSS	GPS/AGPS, GLONASS, BeiDou; internal antenna

Android 11.0

WLAN	IEEE802.11 a/b/g/n/ac, 2.4G/5G dual-band, internal antenna
WWAN	2G: GSM850/GSM900/DCS1800/PCS1900
	3G: WCDMA: B1/B2/B4/B5/B8 CDMA2000 EVDO: BC0 TD-SCDMA: A/F
	4G: B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28A/B28B/ B34/B38/B39/B40/B41
Bluetooth	Bluetooth 5.0
GNSS	GPS/AGPS, GLONASS, BeiDou; internal antenna

Data Collection

Fingerprint

Sensor	Optical Morpho CBM-E3
Sensing Area (mm)	14x22
Resolution (dpi)	500 dpi, 256 greylevel
Certifications	FIPS PIV IQS / ISO 19794-4, MINEX & FIPS 201 complaint, STQC
Format Extraction	ISO 19794-2/4, WSQ, ANSI 378, etc.
Security	FIPS 140-2 level 2, multiple security methods available, including image and templates encryption, template signature, secure tunneling, etc.

Camera

Camera	13MP autofocus camera with flash

Barcode Scanning

1D Linear Scanner	Zebra SE965 / Honeywell N4313
1D Symbologies	UPC/EAN, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc.
2D Imager Scanner	Zebra SE4710 / SE2707
2D Symbologies	PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode; Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal, Dutch Postal (KIX), etc.

NFC

Frequency	13.56MHz
Protocol	ISO14443A/B, ISO15693, NFC-IP1, NFC-IP2, etc.
Chips	M1 card (S50, S70), CPU card, NFC tags, etc.
Range	2-4cm