

Pokini **Tab A8B**



Product Specification

English

Display & Touch	3
Operating System.....	4
Platform & Memory	4
Connectivity	5-6
Sensors	6
Cameras.....	7
Interfaces.....	8-9
Battery Management	9
Maximum Values	10
Mechanical	10
Cleaning Agents and Chemical Resistance.....	10
Drawings.....	11

Display & Touch

Display

Diagonal size	8.4"
Resolution	WQXGA (1600 x 2560 px)
Number of colors	16.7M
Contrast	800:1
Brightness (typ.) – measured with TP	720 cd/m ²
Brightness (typ.) – LCD only	800 cd/m ²
Viewing angle (up/down and left/right)	160°
Display type	IPS
Display lifetime (till 50% of brightness)	min 35k hrs

Touch

Touch panel type	Capacitive
Cover Glass	Gorilla 3, 1.1mm
Bonding	Optical bonding to LCD
Number of simultaneous points	10
Active stylus support	No
Passive pen support	Yes, 2mm tip
Touch with gloves	Yes ⁽¹⁾
Palm rejection	Yes
Moisture rejection	Yes
Home button	No
Touch modes	Configurations optimized for following use cases will be available. <ul style="list-style-type: none"> 1. Finger only use 2. Moisture optimized 3. Glove and stylus

Note 1: Touch registered with cotton glove, equivalent with 2mm insulating layer on top of conductive test barrel.

Operating System

Supported operating system: Windows 10 Enterprise & IOT

Optionally / on request: Linux Ubuntu 16.04 (TBC)

Platform & Memory

Processor	Intel Atom x5-E3940 – 4 Core, 2M Cache, up to 1.8GHz For more information about CPU, please refer to Intel website.
Video features	Intel HD Graphics 500 Intel Quick Sync Video Intel Wireless Display Intel Clear Video HD External display support: HDMI 1.4b up to 3840x2160 px, 30Hz DP 1.2 up to 4096x2160 px, 60Hz Chromecast, Intel WiDi 7.x up to 1920x1080 px, 30Hz
Security	Intel AES New Instructions Intel® Trusted Execution Engine Interface (Intel® TXEI) Driver FW TPM (Intel® PTT3) Intel® TXE Boot Guard 2.0

Memory	4GB (4 x 1GB) LPDDR4 2ch 64bit 2133 Mbps Optional: 2GB (2 x 1GB) LPDDR4 1ch 64bit 2133 Mbps 8GB (4 x 2GB) LPDDR4 2ch 64bit 2133 Mbps
Storage	64 GB (32,128,256GB options) eMMC v5.0 eMMC lifetime 1TB/1GB write during life (32TB for 32GB eMMC)
MicroSDXC cards	Up to 200MHz (SDR104) Up to 2 TB cards supported

Connectivity

LTE Modem - Telit LN940 Global LTE

Nano SIM cards are supported.

Chipset	Qualcom MDM9240
Coverage	Americas, EMEA
Supported LTE bands	LTE FDD: B1/2/3/4/5/7/8/12/13/17/18/19/20/21/25/26/28/29/30/66 LTE TDD: Band38/39/40/41
Supported 3G bands	WCDMA: Band1/2/4/5/6/8/19
Data speed (DL/UL)	up to 450/50 Mbps (Cat-9) - Option for Cat 11 variant
Module carrier approvals	AT&T, Verizon, Vodafone, Telefonica, Orange, Telstra, Docomo, KDDI
Module regulatory approvals	CE, FCC, GCF, IC, NCC, PTCRB

US Antenna SKU	B12, B13, B5, B4, B25, B30
RoW Antenna SKU	B5, B20, B8, B3, B1, B7

WLAN & Bluetooth

Wireless connectivity	WLAN IEEE IEEE 802.11 a/b/g/n/ac/r/k/v ⁽¹⁾ 2x Dual band WiFi antenna Bluetooth 4.2 + HS (class 2 or 1 up to 9.5dBm) Bluetooth profiles: depends on operating system
WiFi bands	2.4 and 5 GHz
WiFi antennas	2 x 2 MIMO
WiFi technology	IEEE 802.11 a/b/g/n/ac/r/k/v
WiFi max speed	867 Mbps
WLAN host interface	PCIe
Bluetooth standard	4.2
Bluetooth host interface	USB
Bluetooth power class	class 2 , 9.5dBm ⁽²⁾

Note 1 : Max radiated output power. Actual output power might be limited due to regulatory requirements

GNSS

Supported satellite systems	GPS GLONASS Galileo
Number of channels	48 tracking channels 2 fast acquisition channels
TTF	Cold start <30s@-130dBm Hot start <2 sec@-130 dBm
Sensitivity	Acquisition: 140 dBm Tracking: -162 dBm

NFC

Supported card formats <i>(depend on used OS)</i>	NFCIP-1, NFCIP-2 NFC Forum device 1.3 ISO/IEC 14443A, ISO/IEC 14443B FeliCa PCD mode MIFARE PCD encryption mechanism NFC Forum tag ISO/IEC 15693/ICODE VCD mode NFCIP-1, NFCIP-2 protocol FeliCa PICC mode MIFARE PICC mode
Standard compliancy	NFC Forum Device Requirements EMVCo for PICC or for PCD mode ETSI/SCP 102 613 and 102 622 for SWP/HCI
Reading distance	up to 3 cm

Sensors

Sensors	Compass Gyroscope Accelerometer Ambient light sensor SAR proximity sensor
---------	---

Cameras

Front Camera

Resolution	2MP
Focus type	Fixed-focus
f-number / aperture	f/2.4
Field of view	~75deg
Focus area, focus distance	0.27 m to 3 m, 50 cm
Flash	NONE
Image resolution & file types	1920 x 1080 px JPEG
Video modes	1080p (FullHD, 1920 x 1080) Frame rate 30 fps

Rear Camera

Resolution	8Mpix
Focus type	Auto-focus
FNO	2.4
Field of view	77.5 deg
Camera min. focus range	10 cm
Flash	Yes
Image resolution & file types	3264 x 2448 px JPEG
Video modes	1080p (FullHD, 1920 x 1080) Frame rate 30 fps

Interfaces

Bottom connectors	40 pin docking connector with USB 3.1 Gen 1 & HDMI data lines and charging. Charging pads (for use in docking station) & pads for device identification
Side connector	USB Type-C <ul style="list-style-type: none"> - USB 2.0 host/device mode - Charging 5V/9V/12V up to 3A. - Charger detection according to USB Battery Charging specification, revision 1.2 - Analog Audio - USB 3.0 host/device mode - DP1.2
µSD card slot	µSD card slot located to battery bay
Smart back accessory interface	Accessory interface at the battery bay, which is backwards compatible with Inari Gen1 accessories. <ul style="list-style-type: none"> - USB 2.0 - Charging - GPIO - I2C - VSYS

Audio

Speakers	Stereo speakers at the bottom 2 Digital microphones (Front/Back) Analog audio interface through the USB Type-C. Acoustic level AVERAGE = 89 dB SPL (A-weighting) Test condition: 10cm distance from the measurement microphone in free field conditions. Measure maximum sound pressure level by using sine sweep @ 0dBFS level.
Microphone	2 digital microphones, front facing microphone array. Microphone sensitivity -29 dBFS Supports VoIP, Speech recognition and voice recording
Bluetooth audio	A2DP, Wideband voice

Hard keys

Volume Up/Down	Rocker key for volume adjustment
Power button	<p>Power ON</p> <ul style="list-style-type: none"> • Short press (>0.01 sec) required to power ON the device. <p>Sleep</p> <ul style="list-style-type: none"> • Short press (less than 3 sec) required to wake up / enter to sleep. • Long press (>3 sec) Shutdown window opening (Win 10). • Long press (3 – 10 sec) required to open the shutdown window. <p>Forced shutdown (HW reset)</p> <ul style="list-style-type: none"> • Holding down the power key more than 10 sec will perform forced shutdown. <p><i>Note : These are the values for typical configuration but might change based on PMIC configuration / BIOS settings.</i></p>

Charging Pads Rating

	Min	Typ.	Max
Operating Voltage Range	4.9V	12V	20V
Absolute max. voltage			25V
Input current	0A	2A	2A
Input power	0W	15W	24W
Under voltage threshold	4.5V		
Over voltage threshold		29V	

Battery Management

Battery type	Li-Po
Capacity	25Wh, 7.6V, 3300 mAh
Charge temperature range	0°C to ~60°C Device will limit charge voltage in case battery temperature exceeds 45°C
Removable battery	Yes
Battery status indicator LED	No
Charging status indicator LED	Yes, on front of device
Operating time (may vary based on use scenario)	Up to 10 hours
Stand-by time	Up to 10 days in connected stand-by
Charging time (in stand-by)	Docking station(24W): 0 - 90% : 1.5 hours 0 - 100% : approx. 2 hours USB-C charger (18W): 0 - 90% : 2 hours 0 - 100% :approx. 2.5 hours Faster USB-C charging supported by higher power adapters.

Maximum Values

Operating temperature range	-20°C to +50°C (component limitations will apply, e.g. battery charging)
Storage temperature range	-20°C to +60°C ≤ 1 month -20°C to +35°C ≤ 6 months Remove the battery from the device when stored over 6 months and store it at a half of full charge in a dry, cool place. Periodically charge the battery to maintain voltage between 7.4V and 7.8V.
Operating humidity	10% to 90%
Max. drop height	1.22 m on plywood (with Inari 8 Rugged Frame 1.8 m) according to MIL 810.G, 3 devices - (1pcs - 6 faces, 1pcs - 8 corners, 1pcs - 12 edges) 1.0 m on concrete
Vibration & Shock	Random Vibration according to MIL 810.G. Vibration Profile: .02g ² /Hz 20Hz to 2 KHz 4grms Test duration: 1 hour per each direction (x,y,z)

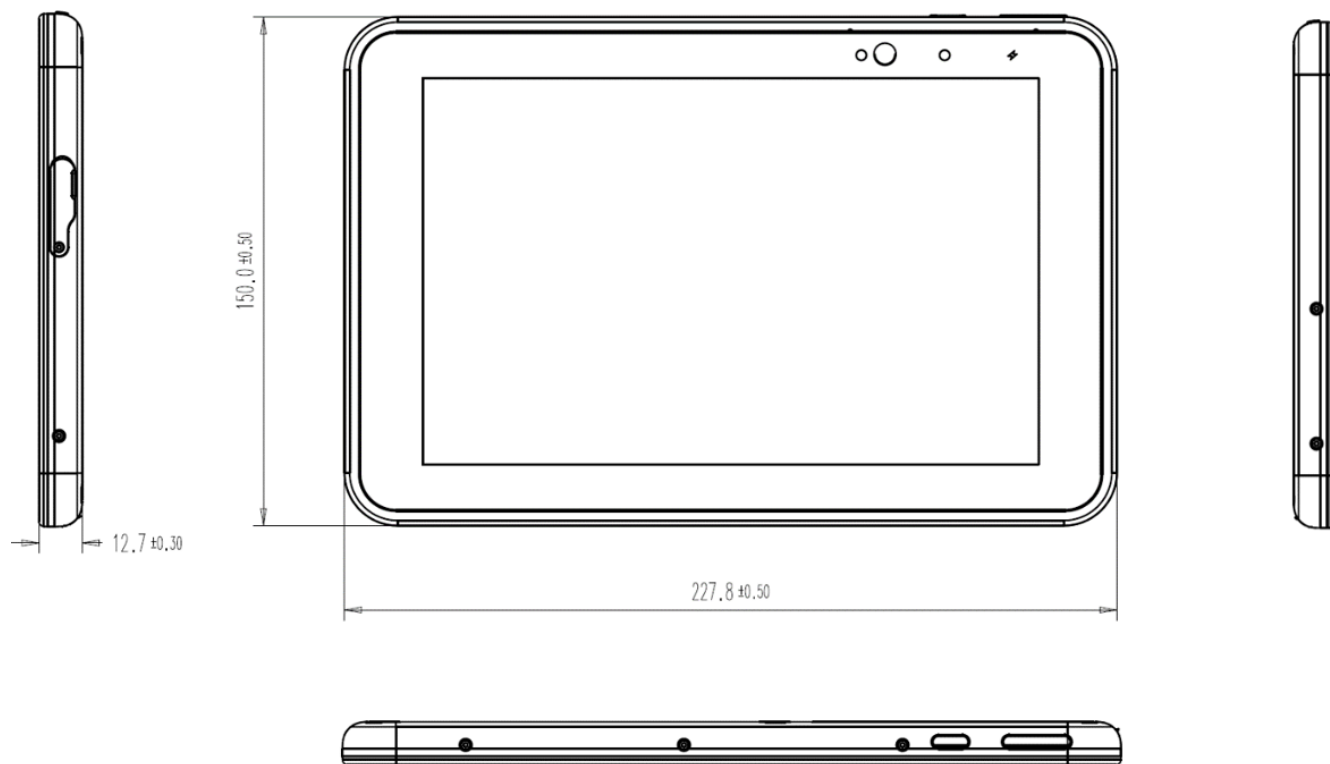
Mechanical

Dimensions (W x H x D)	227.8 x 150.0 x 12.67 mm
Weight	Approx. 540 g
IP class	Tested for IP 65 (dust tight, water jet protection) <i>Only applies if all connector doors and battery cover are closed properly and no deformation of housing (e.g. after corner drops) is present</i>
Surface finishing	Non-painted chemically durable plastic with UL approval (fulfills flammability requirements)
Others	Kensington lock (at the bottom) Four mechanical fixing points (screw holes) at the back Five mechanical fixing points inside the battery compartment Holes for guiding pins for docking at the bottom

Cleaning Agents and Chemical Resistance

Cleaning Agents	- Clorox - Dispatch with Bleach - Clorox Healthcare Bleach Germicidal Wipes - Diversey - Dimension 256 Neutral Disinfectant Cleaner - Ethanol - Isopropyl
Others	- Olive Oil - Vaseline - Nivea Smooth Care Hand Cream

Drawings



Support

You have any technical questions?

If you have problems or questions, please contact us by e-mail:

support@pokini.de

Pokini.de

V 1.0 / 04-2020

All rights reserved. © 2020 EXTRA Computer GmbH
Brühlstr. 12
89537 Giengen-Sachsenhausen
Deutschland / Germany