NEXT Biometrics Fingerprint Sensor
NB-1010-U/NB-2020-U

NEXT Biometrics presents its innovative fingerprint sensor based on the NEXT Active Thermal™ sensing principle

This reverse costing study provides insight into technological data, manufacturing cost, and selling price of the NEXT Biometrics NB-1010-U and NB-2020-U fingerprint sensor assembly.

The same fingerprint sensor die was found in two different products: a DELL Laptop and the NEXT Biometrics Oyster, an access-control peripheral. Supported by PCB, the fingerprint sensor’s dimensions are 25.2 x 19.0 mm, it is driven by a NEXT Biometrics ASIC, and it is protected by a metal cover. The sensor has a resolution of 46,080 pixels, with a pixel density of 385ppi, and it uses the NEXT Active Thermal™ sensing principle to take an image of the fingerprint.

The sensor die is manufactured on glass with LTPS technology and uses a very specific coating to ensure the device’s functionality. The sensor is connected by wire bonding to the rigid PCB. The assembly, including a rigid and a flex PCB to rigidify the structure, is a very particular process designed by NEXT Biometrics.

This report includes comparisons with the latest Huawei, Samsung, and Apple fingerprint buttons.
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Elena is in charge of costing analyses for MEMS, IC and Power Semiconductors. She has a deep knowledge of Electronics R&D and Manufacturing environment.
Elena holds a Master in Nanotechnologies and a PhD in Power Electronics.

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