NEW RELEASE

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SmartWatch : GARMIN fēnix 8 Pro MicroLED 51mm Teardown Report



(front)


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Report overview

The fēnix 8 Pro MicroLED 51mm was released by Garmin in October 2025.
MicroLED is a next-generation self-emissive display technology that arranges microscopic LEDs as individual pixels, delivering extremely high brightness and exceptional durability.
This product is the first smartwatch to incorporate a MicroLED display.
This report presents a teardown analysis of the device, including disassembly of the product, external inspection of the MicroLED display module, and identification of the major ICs mounted on the internal circuit boards.

Product Features

- Display Type: MicroLED (incorporating more than 400,000 individual LEDs)
- Display Size: 1.4 inches
- Resolution: 454 × 454 pixels, 347 ppi
- Peak Brightness: 4,500 nits

Report contents

Teardown Report (15 pages)
- OM imaging of illuminated pixel areas
- Product disassembly
- Display manufacturer confirmation
- Investigation of major ICs mounted on the circuit boards

Additional analyses, including detailed panel characterization and Driver IC analysis, are planned.
Please contact us if you are interested.

Report price

Delivered one week after order placement. Please contact us for report pricing.

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LTEC Corporation
4-42-8 Higashiarioka, Itami-shi, Hyogo 664-0845 Phone.+81-72-787-7385
mail contact2@ltec-biz.com
HP https://www.ltec-biz.com/

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