



# DFI

## Highly-Reputed Quality and Customization Have Become The Cornerstone of High-Precision Intelligent Weighing Machines

The weighing machine, which is electronic and has a built-in label printer, has long been a necessary equipment in the fresh retail. From large pieces of meat to the most delicate truffle chocolate, it provides sufficient accuracy for weighing various items. Modern and more advanced electronic weighing machines are equipped with powerful networking functions. Through a centralized remote management system, the prices and discounts of multiple products can be updated at one time, and the store performance, department profitability, product popularity, and other valuables can be obtained. With DFI's highly-reputed high-quality and business services, industrial-grade motherboards using Intel's latest generation Atom processor has become the cornerstone of integrated weighing retail solution from 200-year-old weighing machine customer.

Region: **Europe**

Industry: **Fresh Food Retail**

Application: **Electronic Weighing Machine**

Solution: **ODM Customized Motherboard**



## Be accustomed to the shopping scenery, behind it is also full of high-technology

"Weights and Measures" is undoubtedly one of the greatest and most important inventions of humanity.

Putting fresh food on an electronic scale, printing out a barcode, pasting the product packaging, and then following the shopping cart to the checkout area has long been a daily scenery that humans are accustomed to. But this seemingly simple process also requires a lot of high technology as the basis for the application.

With the advancement of technology, electronic weighing machines are also integrating more and more newer functions such as a color touch screen that makes operations easier, storing up to 10,000 different product information, and updating product prices at any time through a remote management

system and promotional programs, and conducting business intelligence analysis. However, the only constant is the strict requirements for high reliability and reliable product quality.

A specific European weighing machine manufacturer, founded in 1796 and started with the manufacture of steam engines with a history of more than 200 years, initially used the products of a specific industrial computer manufacturer for 15 years. It must consider the specifications of the new generation of electronic weighing machines and require better product quality and business services. Due to DFI's accumulated reputation in industrial automation and digital healthcare, and referring to the evidence of strategic alliances between ACL, a well-known German medical computer manufacturer, and DFI, they chose a customized industrial-grade motherboard based on DFI's EHL171 Mini-ITX as the cornerstone of its new generation integrated electronic weighing machine product line.



## When the latest technology is combined with the best service

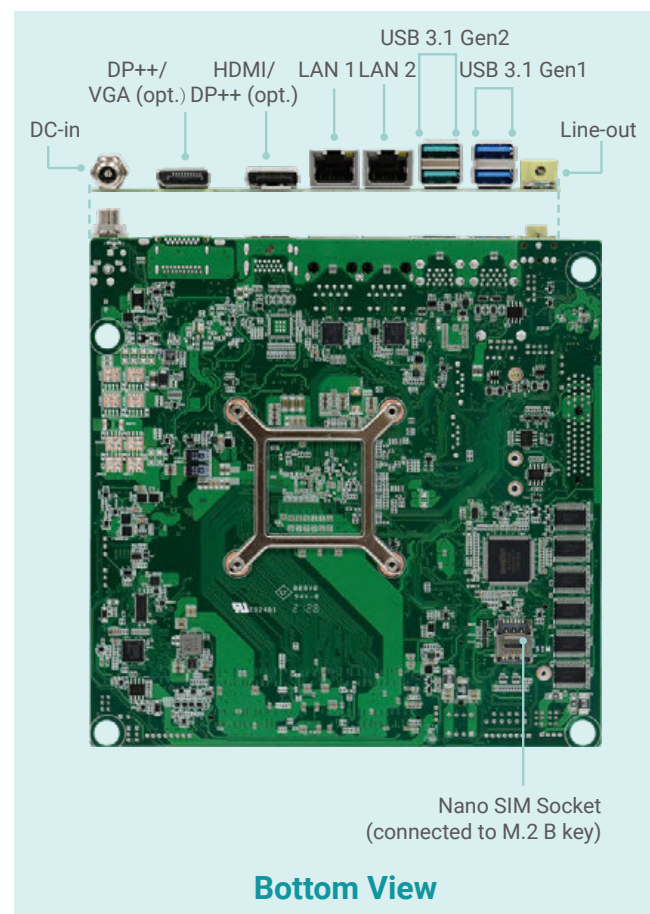
EHL171 uses Intel's Atom x6000 series processors (code-named Elkhart Lake) that officially launched in the first quarter of 2021, and it based on third-generation Out-Of-Order Execution (OOOE) Atom micro-architecture "Tremont." Compared with the previous generation, the single-thread performance is increased by 1.7 times, the multi-thread performance is increased by 1.5 times, and the graphic performance is increased by two times. According to different models, the thermal design power ranges from 4.5W to 12W, which meets less than the requirement for 5W.

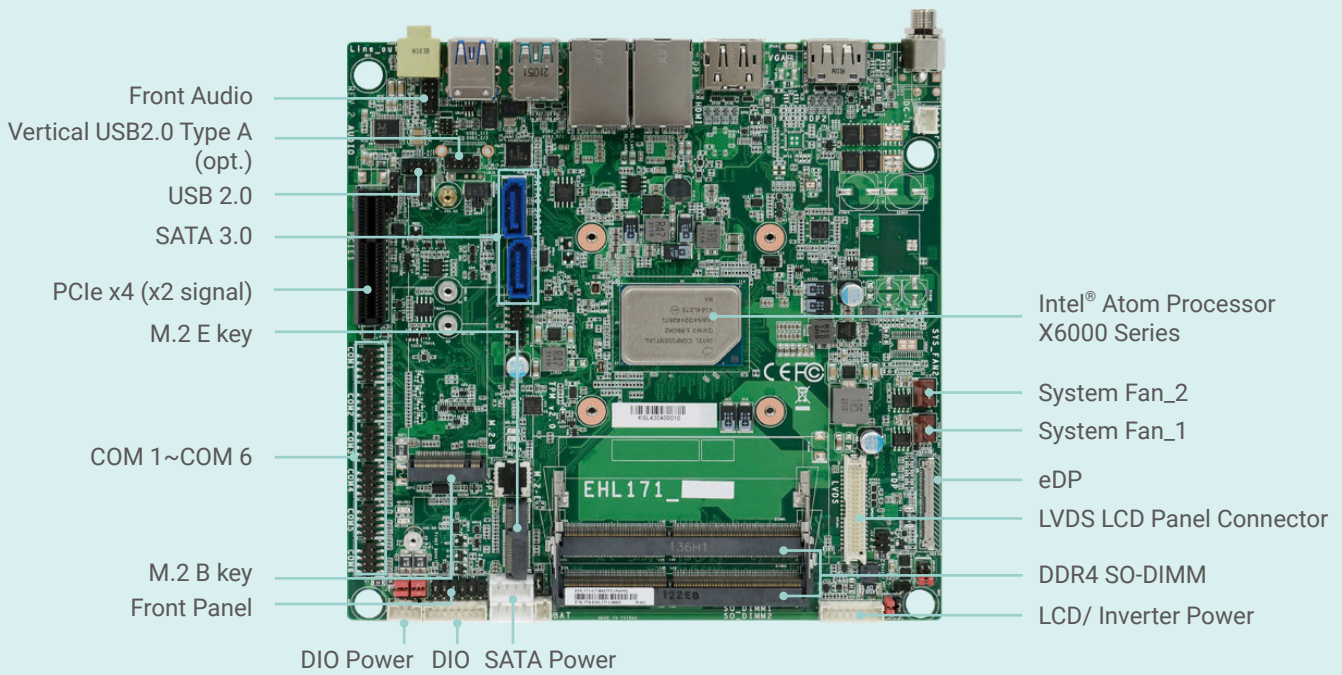
In addition, the Atom x6000 series processors are equipped with Programmable Services Engine (PSE), which can use in-band monitoring function and management devices via Wi-Fi or wired Ethernet to perform remote firmware and software updates. When the operating system does not respond, it uses the out-of-band management function through wired Ethernet. The Atom x6000 series processors are also unambiguous in terms of security. The silicon chip has a built-in security function that complies with IEC 61508 and ISO 13849 specifications. The new generation of graphic can drive up to three 4Kp60 resolution displays.

DFI's EHL171 gives full play to the potential of the specifications of the Atom x6000 series processors. It provides all the I/O interfaces on the motherboard and are sufficient enough to meet the needs of electronic weighing machines, such as connecting weighing devices, thermal label printers, cash drawers, barcode scanners, electronic transfer chips, card reader, front operation panel, and full-color touch screen. This 200-year-old European

manufacturer has also developed an exclusive remote centralized management system to update the prices and discounts of multiple products at once and obtain valuable information about store performance, departmental profitability, and product popularity. EHL171 with complete networking capabilities is a perfect match made in heaven.

The main reason why DFI was finally selected among many competitors is not only because of its excellent product quality, but also because of its mission-oriented customer service. As early as November 2020, DFI quickly sent samples and fully responded to customer needs. Due to the demand for three additional video outputs, DFI customized for this by modifying to two internal eDP and one





**Top View**

\*The photo above refers to EHL173.

external HDMI, and adjusted the motherboard layout and size for its mechanism.


According to the Intel product schedule, the Atom x6000 series will be available until the first quarter of 2036. There is no need to worry about the product being unsustainable within 15 years. This is a top priority for the fresh food retail industry with a long period of equipment deployment.

## 200 years of innovation depends on 40 years of experience

Founded in 1981, DFI has a history of 40 years and is the world's leading supplier of industrial computers and embedded solutions. Relying on innovative design and excellent quality management system, DFI's industrial-grade solutions optimize the customer's device design and provide high reliability,

long life cycle, and all-weather durable products and missions for intelligent retail and other fields of service. DFI's highly acclaimed high quality and customization have become the cornerstone of high-precision intelligent weighing machines.

Please click or scan the QR code to see our website if you would like us to contact you.



# DFI

Founded in 1981, DFI is a global leading provider of high-performance computing technology across multiple embedded industries. With its innovative design and premium quality management system, DFI's industrial-grade solutions enable customers to optimize their equipment and ensure high reliability, long-term life cycle, and 24/7 durability in a breadth of markets including factory automation, medical, gaming, transportation, smart energy, defense, and intelligent retail.

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