

PCB Stator Motor Design Can Improve Your Products and Bottom Line

With its PrintStator SaaS and New Industrial OEM Products Division, ECM extends the benefits of PCB Stator technology across the globe.

If your business makes or uses electric motors, you'll want to read this.

That's because disruptive **PCB Stator** innovation is poised to transform the design and performance of electric machines in everything from home appliances to pumps and industrial robots.

ECM is a Boston-based company that pairs this patented printed-circuit-board-stator technology to advanced Motor CAD. The combination enables engineers to optimize electric motors that are smaller, quieter, and more energy efficient.

Adoption of **PCB Stator** innovation offers numerous design, production, and bottom-line benefits to electric motor OEMs—and any company that uses electric motors.

Here's a snapshot of those advantages.

Competitive Edge

The first is competitive edge. That begins with **PrintStator**, ECM's award-winning Motor CAD platform and SaaS product.

PrintStator powers the design of electric motors with patented **PCB Stator** innovation that replaces bulky copper windings with an ultra-thin disc.

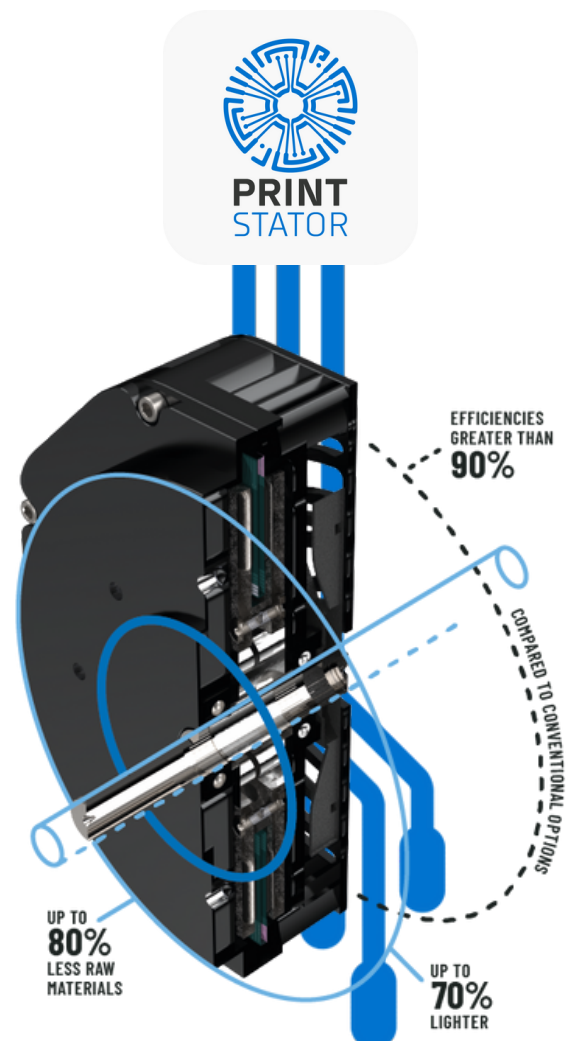
As a result, **PrintStator** designed motors are:

- Up to 70% lighter than conventional options
- Achieve efficiencies greater than 90%
- Require just 20% of the raw materials (notably copper); and
- Are acoustically quieter—by up to 30 dB

PrintStator extends these competitive advantages by allowing you to design electric motors to precise performance and dimensional specs.

Moreover, **PrintStator** facilitates a rapid design to production cycle—weeks to months, not months to years—and the ability to quickly iterate on past designs, allowing for timely upgrades.

All this adds up to empower electric motor innovators to create superior products that gain and maintain an edge in their markets.



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Bottom-Line Benefits

As a production option, **PrintStator** designed motors are cost competitive at a unit level—and bring numerous benefits to reducing total costs.

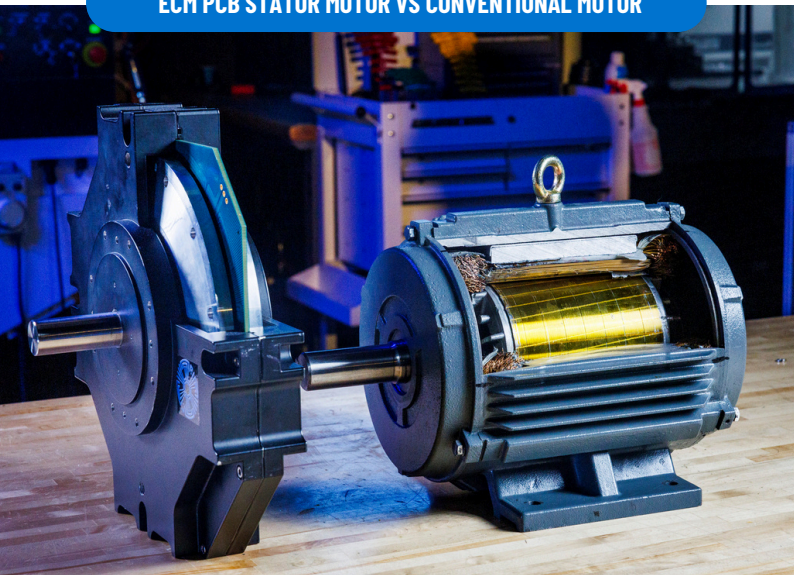
To start, **PCB Stator** machines reduce capex and production expenses through simplified manufacturing processes. By requiring significantly less copper than conventional BLDC units, **PCB Stator** electric motors eliminate the need for the labor and equipment-intensive copper winding process used for conventional machines.

Additional total cost benefits to **PrintStator** designed **PCB Stator** motors include slashing product packaging and shipping expenses—by reducing size and weight.

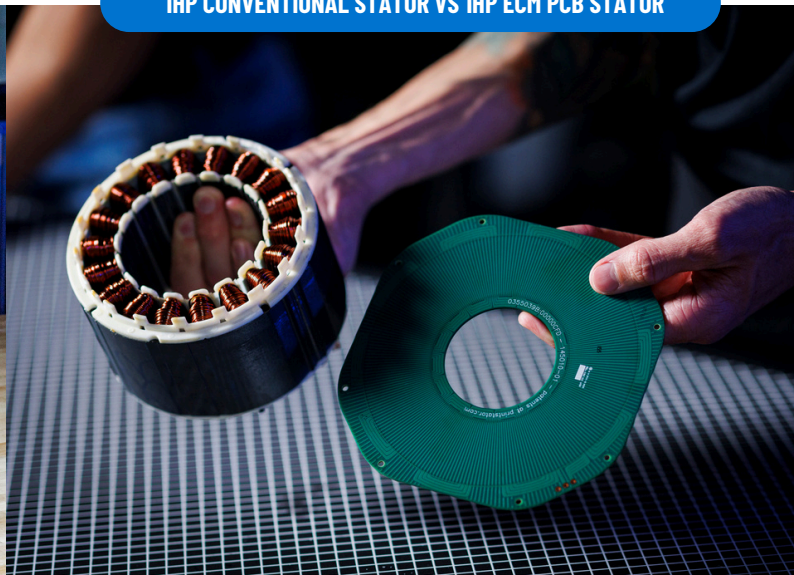
Less size and weight translate into less raw materials for components and additional savings in manufacturing processes.

And the increased durability and efficiency of **PCB Stator** motors means lower overall operational and electricity costs, due to less maintenance and longer lifespan.

ECM PCB STATOR MOTOR VS CONVENTIONAL MOTOR



1HP CONVENTIONAL STATOR VS 1HP ECM PCB STATOR



Vertical Integration

And if that's not enough, there's the benefit of greater control over production and supply chains.

As a SaaS offering, **PrintStator** allows any innovator—from SME entrepreneur to big-company engineer—to become a **PCB Stator** electric motor designer and manufacturer.

How? By leveraging **ECM's** global PCB production partner network. This enables immediate prototyping, rapid time-to-market, and greater supply-chain control through vertical integration.

And most significantly, it opens up the competitive benefits of printed circuit board stator design—and production—to anyone with a PrintStator software license.

Regulatory Compliance

Finally, **PrintStator Motor CAD** and **PCB Stator** technology provide businesses a cost-effective solution on regulatory compliance.

That includes IE4 and IE5 standards and US and EU minimum energy performance requirements.

To comply, you don't have to revamp factories or hire a bunch of consultants.

PCB Stator electric motor design offers a fast track to meeting exact regulatory requirements in a capital efficient manner.

That's a snapshot of the bottom-line benefits of adopting **PrintStator** Motor CAD and PCB Stator technology.

The question for electric motor players is: can you thrive—or survive—in the 21st century innovation race without them?

To design your own PCB Stator machines, connect with ECM's New Industrial OEM Products Division and PrintStator team today at pcbstator.com.

