STRATEGIC BRIEF

Brazilian EMS Providers in Focus

Quality, Suitability and the Right Production Volume When Brazil Is the Target Market

Dirk Kaussen | EMS Strategy Group | Rev.: 1.0 | 11 September 2026

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Companies seeking to serve the Brazilian market with their products quickly face the question of whether local manufacturing through an EMS provider makes more sense than importing finished goods. Unlike classic nearshoring to Eastern Europe, Brazil is not primarily used as a production base for other markets. The decisive factor is the large Brazilian domestic market itself – together with a tax and customs system that can, in many cases, favor local manufacturing over the import of finished products.

This Strategic Brief examines how capable Brazilian EMS providers actually are, why local manufacturing can often be more economical than importing, and from what production volume the associated effort becomes worthwhile.

How Good Are Brazilian EMS Providers?

Brazil has a well-established EMS landscape with two clear focal points. One is the Zona Franca de Manaus, where global electronics companies have been manufacturing mobile phones, televisions, network equipment and other electronic products in high volumes for decades, supported by extensive tax incentives. The second focal point is the state of São Paulo, particularly the areas around Sorocaba, Campinas and Jundiaí, where consumer electronics as well as industrial, automotive and telecommunications manufacturing are concentrated.

International EMS groups are present in both regions and have established quality and production systems. Depending on customer and product requirements, these include ISO 9001 as well as IATF 16949 in the automotive sector. For customers with established global EMS relationships, this level of quality can generally be transferred to a Brazilian site relatively reliably within the existing corporate framework.

Foxconn and Flex, among others, are based in the Zona Franca de Manaus. Foxconn has been manufacturing there for international customers for many years and has also expanded its presence in Brazil to locations in the state of São Paulo. Flex likewise operates manufacturing sites in Manaus and the state of São Paulo. Samsung and LG also operate large production facilities in Manaus, but mainly manufacture their own branded products there and therefore cannot be equated with a classic open EMS provider.

For most clients of EMS Strategy Group, however, the large corporate plants mentioned above are not a realistic option. Their capacities and processes are often geared toward major customers and high volumes. A project with significantly smaller volumes will therefore not automatically receive the same priority within an international group as a large-volume order.

This does not mean, however, that the Zona Franca de Manaus is unsuitable for medium volumes. Alongside the well-known large companies, smaller specialized EMS providers have also established themselves there, focusing on outsourcing, SMT, PTH and other manufacturing services. One example is Venttos Electronics, which has been operating in Manaus since 2008 and also provides manufacturing services to companies that do not want to establish their own production line. Such providers can combine the advantages of the location with production volumes that are better suited to medium-sized customers. Comparable high-mix manufacturers can also be found in the São Paulo cluster, such as Hi-Mix Eletrônicos, which offers SMT, THT and box-build manufacturing.

Among smaller, purely local manufacturers outside these established names, process maturity varies noticeably, particularly outside high-volume consumer goods production. Companies bringing smaller or medium-sized production volumes, niche applications or specific testing and documentation requirements should therefore assess manufacturing processes, test coverage and quality documentation directly at the plant before signing a contract, rather than relying solely on reference lists.

Assessment

The large corporate plants in Manaus are highly capable, but are effectively of greatest interest to large customers. Companies that do not reach this scale therefore do not necessarily need to change locations, but can instead specifically look for smaller providers specializing in medium volumes within the Zona Franca de Manaus or the São Paulo cluster.

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A plant that has been manufacturing smartphones or other electronic products in very high volumes for years is also not automatically the right partner for a small series with high component diversity. In addition to technical capability, the actual priority given to the project, flexibility regarding production volumes and the EMS provider's willingness to implement the required processes economically are decisive factors.

Why Manufacturing in Brazil Can Be Worthwhile

Manufacturing in the Zona Franca de Manaus can benefit from one of Brazil's most significant industrial tax incentive systems. These include, among other things, a reduction of import duties of up to 88 percent for certain industrial processing activities for the Brazilian market, as well as extensive incentives relating to IPI, PIS/COFINS and ICMS. The specific level of benefits depends on the product, NCM classification, production process and the applicable approvals.

This advantage can be significant because importing finished products into Brazil can, depending on the product, be subject to several taxes and duties. These include in particular import duties, IPI, ICMS, as well as PIS and COFINS. The actual burden depends heavily on the product, tariff classification, origin and other factors. The actual import burden should therefore always be calculated for the specific product rather than using flat tax rates.

This is precisely where local manufacturing can provide a significant advantage. For a product approved for the Zona Franca de Manaus, certain import and production taxes may be reduced, suspended or waived. However, this requires compliance with the legal requirements of the respective incentive system and, where applicable, the requirements of the Processo Produtivo Básico (PPB). Companies with an industrial project approved by SUFRAMA benefit, among other things, from special advantages when importing production materials.

The long-term advantage of the Zona Franca de Manaus is also legally secured. The special status of the ZFM has been extended until 31 December 2073. At the same time, Brazil's ongoing tax reform is changing the structure of indirect taxation. From 2027 onwards, this includes the abolition of PIS/COFINS and the gradual transition from ICMS and ISS to the new IBS system. Special mechanisms are provided for the Zona Franca de Manaus to maintain its competitiveness.

A practical consideration also applies to products with wireless interfaces, ranging from Wi-Fi and Bluetooth to mobile communications. For many telecommunications products, certification or homologation by Anatel is required before they can be marketed in Brazil. The specific effort depends on the product, technology and applicable conformity procedure and should therefore already be taken into account during project planning.

As of 8 September 2026, certification and homologation procedures are being processed through the new Anatel system Certifica. The previous SCH system will no longer accept new applications from this date.

Assessment

The tax advantages of the Zona Franca de Manaus can be substantial for suitable products. However, they are not generally available for every type of electronics manufacturing. Product classification, PPB requirements, the approved industrial project and the specific tax structure must therefore be examined before a location decision is made.

For a company intending to serve the Brazilian market over the long term, these factors should be viewed less as a one-time hurdle and more as part of a multi-year TCO assessment. Only a comparison with the full cost of importing will show whether local manufacturing actually provides a structural economic advantage.

At What Production Volume Does EMS Manufacturing in Brazil Become Worthwhile?

For the Brazilian market, the answer depends more strongly than in many classic nearshoring projects on fixed costs and the tax structure, and less solely on labor cost savings.

● **Very small series and test markets of up to approximately 500 to 1,000 units per year:** Importing finished goods is often still the more pragmatic approach, particularly if local manufacturing does not generate sufficient tax advantages and a complete local supply chain would first have to be established.

● **Medium series of approximately 5,000 to 50,000 units per year:** In this range, local EMS manufacturing can become economically attractive. Whether the São Paulo cluster or the Zona Franca de Manaus is the better solution, however, depends heavily on the specific product, tax structure, PPB requirements and additional logistics costs.

● **Larger series above approximately 100,000 units per year:** As volumes increase, the costs associated with local manufacturing, qualification, material supply and, where applicable, PPB requirements can increasingly be spread across the production volume. For products that qualify for the incentives of the Zona Franca de Manaus, this can give Manaus a significant economic advantage. Whether this advantage actually outweighs the additional logistics and supply-chain costs must be determined through a TCO calculation.

These production volumes should be understood as strategic guidance rather than fixed market thresholds. A high-value product with a high import burden can become attractive for local manufacturing at significantly lower volumes, while a simple product with low value-added may remain economically viable to import even at higher volumes.

Assessment

Companies that are unsure whether their product qualifies for the benefits of the Zona Franca de Manaus or what regulatory requirements apply should clarify these questions before planning production volumes. Particularly in electronics, NCM classification, PPB, tax incentives, material structure and certification can influence the economic threshold more strongly than the EMS provider's hourly labor cost alone.

Conclusion

With the Zona Franca de Manaus, Brazil is one of the particularly attractive electronics manufacturing locations in Latin America from a tax perspective. The combination of a large domestic market, import burdens and specific tax incentives can make local manufacturing significantly more attractive than importing finished products. However, the specific advantages always depend on the product and the respective tax and production structure.

Brazilian EMS providers in the established Manaus and São Paulo clusters achieve an internationally competitive level of quality – both large corporate plants serving high-volume production and smaller specialized providers serving medium volumes. For medium-sized OEMs, the largest EMS provider is therefore not automatically the best solution. Particularly for smaller production volumes, specialized high-mix manufacturers can offer a better combination of flexibility, technical expertise and economic scalability.

The economically viable production volume cannot be determined by unit volume alone. What matters is the relationship between import costs, tax burden, manufacturing costs, logistics, material supply, certification and, where applicable, PPB requirements. A reliable location decision should therefore always be based on a product-specific TCO calculation.

For companies whose target market is Brazil itself, local EMS manufacturing can therefore be much more than an alternative to importing: it can be a strategic way of serving the Brazilian market competitively over the long term.

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Sources

- **SUFRAMA – Incentives for Special Areas in Western Amazonia and ZPEs** Official overview of the tax advantages of the Zona Franca de Manaus, including import duties, IPI, PIS/COFINS and ICMS.
- **SUFRAMA – FAQ: Tax Benefits for Industrial Imports** Official explanation of the tax advantages for companies with an approved industrial project in the ZFM.
- **Receita Federal – Tax Reform on Consumption** Official information on Brazil's ongoing tax reform and the 2026–2033 transition period.
- **Anatel – Certifica** Official information on the new system for certification and homologation of telecommunications products, to be used from 8 September 2026.
- **Anatel – Introduction of the Certifica System** Official announcement concerning the transition from the previous SCH system to Certifica.
- **Venttos Electronics** Company information on EMS/electronics manufacturing in Manaus.
- **Hi-Mix Eletrônicos** Company information on SMT, THT, box-build and other electronics manufacturing services in Brazil.

About the Author

Dirk Kaussen is Founder and Managing Director of EMS Strategy Group. With around 40 years of experience in the electronics industry — including founding and managing his own electronics manufacturing company in Germany — he brings deep expertise in manufacturing processes, EMS partner selection, supply chain stability, relocation projects, and risk management. His approach combines practical solutions with a direct connection to industrial reality.

About the EMS Strategy Group

EMS Strategy Group supports industrial enterprises in the strategic and operational advancement of their electronics manufacturing. Our core expertise lies in the strategic relocation of manufacturing volumes, the selection of qualified EMS partners, the establishment of new production capacities, and the expansion of existing manufacturing structures.

Furthermore, we design resilient supply chain frameworks, conduct comprehensive risk assessments, and guide dual-sourcing strategies, with operational support through to a successful series production ramp-up.

www.emssg.com | LinkedIn: Dirk Kaussen

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