

Infineon sets ambitious target for Indian market



“In India, we expect to grow significantly in the next few years,” says Youvraj Chandrakar, Country Head, PMM Division, Infineon Technologies India

Infineon Technologies provides innovative semiconductor solutions focusing on energy efficiency, mobility and security. Looking at the increasing opportunities in Indian market, Germany's largest and Europe's second largest semiconductor company, aims to increase its footprint in India. Youvraj Chandrakar, Country Head, Power Management and Multi-market (PMM) Division spoke to Subhajt Roy and highlighted the industry trends, company's strength and future roadmap.

Being the Country Head of PMM Division for Infineon India, what is your perception on the opportunities for PMM business in India?

PMM offers semiconductors for efficient power management and high-frequency applications. The components are used in e.g. lighting, servers, telecom systems, computers, consumer electronics, mobile devices and wireless infrastructures.

We optimise the efficiencies along the entire electrical energy supply chain: from generation, distribution to consumption. Chips of PMM set the benchmark in energy efficiency (saving power) and power density (saving space).

As India invests on modernising its infrastructures, improving the standard of living, the level of services and connectivity for its citizens, we expect the growth to drive the overall demand for electric powered devices, creating a huge and attractive market for home grown electronics industry. These are opportunities for PMM. As a market leader in power semiconductor for the past 9 years, with strong expertise in RF, and profound system understanding, we believe we are the partner of choice. Some examples of applications include

LED drivers in lighting for higher efficiency and durability, microinverters in solar systems for lower system maintenance cost, power supply management in telecom equipment requiring less cooling, and RF Power for cellular infrastructures.

In the past 12 years what kind of growth you have witnessed?

We started operations in June 1997 and since then have built a strong team. Over the past few years we have increased our PMM resources in India. We see India as a significant growth region where we have set up branch offices in Delhi, Pune and Chennai extending our reach from main office in Bengaluru.

Which is the most significant vertical for you?

All the verticals are important to us. Energy efficiency, mobility and security are the three major challenges of urbanisation and mega-cities. Right now, our primary focus is SMPS (Switch Mode Power Supply) and lighting, renewable energy sector covering solar and wind power conversions. Key product families are our best in class CoolMOS and OptiMOS.

There are few players who are already established in the energy management segment. How different is Infineon when you compare your business with other energy management players?

We have a broad range of products catering to a large segment. From digital control ICs, drivers and power discretes for voltage regulators, LED drivers, RF diodes and transistors, RF power, to chips for silicon microphones, TVS diodes, ASIC design solutions for authentication and battery management. Being a German company, superior quality of

our products run in our DNA. We focus on application centric innovation.

What are some of your long- and short-term objectives?

We have a long standing relationship with our customers. They look for increased innovation capability, forward integration, faster development / time-to-market, lower system costs, higher efficiency and simplified systems. We are looking at building a strong technical support team to aid our innovation practices and to help our customers make competitive products.

Are you doing any kind of R&D especially for the Indian market?

We have a system engineering group in addition to sales and marketing. Apart from promoting our products, we are coming up with reference solutions for products. These reference designs which are almost ready-to-use help customers to visualize. Furthermore, we have around 320 people at our design centre in Bengaluru doing a host of design activities for Infineon worldwide. In future, it is a distinct possibility to localised products for the India as the market segment matures.

Since the semiconductor industry is having huge potential in India,

are you looking at making India Infineon's manufacturing hub in this sector?

We do not have any concrete plans at the moment but we are following closely the development in this area.

Any new product you decide to launch for the India market?

We identify products which could be relevant for the market at a particular point of time and we promote these products in the market. In a way our marketing efforts are customized. We have a broad product portfolio that can already serve many different requirements. For example, we are promoting our C7 CoolMOS C7 which provides the world's lowest RDS(on) per package. Compared to the nearest competitor, the C7 provides 34 per cent lower RDS(on) in TO-247 package and 29 per cent in TO-220. Thanks to its low switching losses, efficiency improvements over the full load range can be attained. The fast switching performance of C7 now enables customers for the first time to operate at switching frequencies greater than 100 kHz whilst achieving Titanium levels of efficiency in Server PFC stages. This enables higher power density by reducing the space requirements for the passive components. In other words,

same losses at higher frequency lead to size reduction of magnetic components for improved power density. Within SMPS applications, high efficiency targets are required across the entire load range starting at 20 per cent or even at 10 per cent load. With Infineon's CoolMOS C7, a 650V, this target can be reached easily.

Recently the government announced 100 smart cities projects. How do you think Infineon fits in this context?

The Smart Cities project created a lot of excitement among system solution providers in the ICT domain and this has also a positive effect on semiconductor companies that serve ICT.

From Infineon standpoint, we believe the first steps to becoming a smart city is infrastructure upgrade such as high speed digital connectivity, smart power grid, a well networked public transportation system, smart factories and eGovernment services built with long-term sustainability in mind, to cut congestion and pollution.

Infineon has many enabling solutions to support the development of a smart and sustainable city. We look forward to more announcements to see where we can contribute. ⚡