



Delivering the World's Slimmest Gesture-Controlled Smart Band



The Reflex Wav is designed to be an affordable, stylish and multi-functional smart watch.

Titan Company Limited, a joint venture between the TATA Group and the Tamil Nadu Industrial Development Corporation (TIDCO) commenced operations in 1984 under the name Titan Watches Limited. Titan Company is the fifth largest integrated own-brand watch manufacturer in the world. With a retail footprint of over 1,400 stores, Titan Company has India's largest specialty retail network spanning over 240 towns. Today, Titan Company Limited is TATA's largest consumer company, and India's leading producer and retailer of watches, jewelry, eyewear and accessories. Titan is one of the few players to launch a smart wearable for the Indian market.

The Product

Titan's Fastrack Reflex Wav is the world's slimmest gesture-controlled smart band, offering fitness tracking, notifications, second city time, calendar alerts, weather alerts & alarm functions. However, the Reflex Wav has two very distinct features – gesture control and 24-hour automatic sleep tracking.

The gesture-control feature allows a user to change music, reject or mute an incoming call, capture photos, and control presentations without touching a phone or the band by only mobilizing their wrist. The 24-hour automatic sleep tracking feature captures sleep patterns throughout the day without the user having to manually put the band into sleep mode.

Reflex Wav comes with a OLED Display and is compatible with phones running on Android 5.0 and above or iOS 8 and above.

Challenges

Titan Company was focused on developing a unique wearable to address the demand in the urban youth market through their Fastrack brand. Since the product was targeted at youth, cost targets were challenging for the project to be viable. Also, the 9mm slimmness meant that the entire assembly of the band had to be done in a very controlled environment with plenty of technical expertise.

Solutions

With vast experience in designing and building products for an intelligent world, we offered optimized solutions in both engineering and manufacturing processes for Reflex Wav.

In the product development stage, PCBA design saw circuit boards, metal parts and battery packs integrated to lower materials cost and ease scalability. Along with other optimization efforts, we provided prototyping, process analysis/development, testing, validation and integration services in ensuring seamless transition to production.

Our GPSC team also extended support in procuring parts and components at faster pace and optimum prices. This has enabled Titan Company to stay within production costs, schedules and expectations.

In manufacturing the Reflex Wav, we provided expertise in PCB assembly, test and advanced engineering, NPI, pilot and volume ramping, process reliability tests and failure analysis. At the same time, we also facilitated continuous lean activities to maximize yield.

The final product is then delivered to customers via a robust logistics network.

Key Success Factors

Sketch-to-Scale® – Our vertically integrated capabilities throughout the entire product life cycle delivered Titan Company optimal solutions all along the value chain where there were challenges.

Wearable Experience – We have historically delivered innovative wearable solutions to a multitude of multinational customers. In-depth understanding of the industry enabled knowledge transfer that ensured Reflex Wav's successful, on-target productization.

Technology Convergence – Cross-industry visibility provided a platform to integrate multiple hardware and software technologies into the Reflex Wav.

Speed – The rapid work pace at Flex enabled the Titan Company to bring its product to market within timeframe expectations.

Results

- » Optimized product design for lower cost and improved manufacturing scalability
- » Seamless integration of various technologies into a unique multifunctional device
- » Met market entry cost and timeline targets
- » Developed strong platform for further Sketch-to-Scale® partnerships



Product design was optimized to lower cost and improve manufacturing scalability.

For more information, please visit flex.com or follow us on Twitter @flexltd

Flex is the Sketch-to-Scale® solutions provider that designs and builds Intelligent Products for a Connected World®. With approximately 200,000 professionals across 30 countries, Flex provides innovative design, engineering, manufacturing, real-time supply chain insight and logistics services to companies of all sizes in various industries and end-markets. Flex – Live Smarter™.

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