

# Blog for Syrma Technology

<https://www.syrmatech.com/world-cup/>



## NFC, RFID and Other Technology Used at the 2018 World Cup

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Leading-edge technology played integral roles in the 2018 World Cup, held earlier this summer in 11 soccer venues across the Russian Federation. The most prominent application was RFID ticket authentication. With over three million total tickets available for 64 scheduled matches, rabid soccer fans required state-of-the-art protection against the disappointment of acquiring counterfeit tickets. The Fédération Internationale de Football Association (FIFA), which organizes the World Cup, solved this long-nagging problem by adding a printed RFID inlay on every ticket.

As thin and flexible as the paper ticket stock—and far more technically intricate than a standard barcode, these smart tickets were also programmed with ID data of the original purchaser—making them virtually impossible to illegally duplicate. During two separate scans at stadium entrances, ushers assured every ticket holder possessed the genuine article, thwarting



counterfeiters looking to prey upon legions of visiting fans from around the globe.

### **Now Serving...Smart Beer?**

Once inside the stadium, as with most live sporting events, enthusiastic fans relish a frosty beverage while enjoying the action. Vendors at the World Cup venues treated fans to a unique plastic beer cup, enhanced with a small embedded microphone and organic light-emitting diode (OLED) lights. During instances of loud crowd noise—such as cheers for a soccer goal—the innovative cups reacted with corresponding bursts of colored light, creating an impressive visual effect throughout the stadium. Intended to deliver this novelty for only the short duration of a soccer match, the maker of these cups relied upon sourcing low-cost components to successfully deliver up to 10 million cups at an acceptable price point.

### **High-Tech NFC Soccer Balls**

The official ball used in the 2018 World Cup was the [Adidas Telstar 18](#), the latest update of the original Telstar ball used in the 1970 competition—when its black and white leather panels were hailed as easier to follow on television. This newest Telstar includes more modern technology—a near-field communication (NFC) chip embedded beneath the Adidas logo authenticating the ball as a legitimate non-counterfeit, as well providing the purchaser with a host of interactive features via a smartphone app.

This NFC chip includes specific information about each ball and GPS tracking, as well as unlocking digital games, access to World Cup insider updates and online discussions, along with other exclusive content. The NFC tags were also specially designed for durability to withstand the harsh impacts routinely endured by a soccer ball. Adidas promises even more new electronic bells-and-whistles ahead for future Telstar models in time for the next World Cup, hosted by Qatar in 2022.

### **More Electronic Sports Products**

The soccer fans among us at Syrma took particular notice of where and how these applications benefited the World Cup fan experience. Considering the eternal worldwide popularity of soccer and other sports, we look forward to helping sports-minded OEMs bring further next-generation innovations to this lucrative global market.

Syrma has been co-creating with customers custom-designed inlay tags, NFC tags, and smart IoT devices for over a decade in medium to very large volumes. Learn more about our world-class OEM design and manufacturing capabilities [here](#).