Abstract

The Quick Response (QR) code is widely popular in daily life due to reading high speed application and greater storage capacity of storing information. In this paper, we present a new rich QR code that has two storage levels. Public level and Private level, The level one named a public level, and level two named as private level. The Private level is designed by replacing the modules using specific textured pattern. It is to be made up or composed by q-ary code with an error correction capacity. This allows us not only increase the storage capacity but also improve the security of QR code. The public level is the same as the standard QR code storage level; therefore it is readable by any classical QR code application.

References

15. /ese558report_LinLiu.pdf

**Index Terms**

Computer Science Information Sciences

**Keywords**
QR code, Public level, Private level, AES encryption, Reed-Solomon code document authentication and Data hiding.