GRAPE SYSTEMS

RZ Ecosystem Partner Solution

Grape Barcode / Two-dimensional code Source Code Library

Overview

Grape Systems provides various range of source code libraries to encode and decode one-dimensional barcode and two-dimensional code. All code products are developed in-house, and we also undertake related contract development.

Using the DRP (Dynamic Configuration Processor) peculiar to RZ/A2M, a multi-code read demo (using GR-MANGO) that reads and compares with the open source "ZXing" shows the high accuracy of our code products. You can see high-speed scanning.

Product Features

- Source code written in C language is provided.
- Flat, one-time fee, royalty-free.
- Platform(CPU, OS) independent.
- Small footprint, compact libraries optimized for embedded syst ems.
- Help customers shorten development cycle, reduce cost, and exp edite product launch.
- Feel free to contact us if you need any further information.

Diagram

GR-QR Encoder/Decoder

GR-BARCODE Encoder/Decoder

GR-DataMatrix Encoder/Decoder

GR-PDF417 Encoder

GR-Aztec Encoder (Under development)

GR-GS1 DataBar Encoder/Decoder (Under development)

Target Market and Use case

- Encoding Library Product : A device that generates various codes such as printer printing and screen display
- Decoding Library Product :A device that reads various codes from images captured by an image scanner or camera.

https://www.grape.co.jp/eng/index.html

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GR-QR

QR Code® Encode/Decode

Encode Features

- QR Code® model 2 、micro QR Code® supported.
- JIS-X0510 compliant.
- Numbers, alphanumeric, 8-bit byte, and kanji mode supported.
- Fixed-length data applications supported.

QR Code® model 2

Micro QR code®

Decode Features

- QR Code recognized and decoded from 8-bit monochrome images.
- QR Code® Model 2 supported.
- Micro QR Code® supported. (optional)
- JIS-X0510 compliant.
- Numbers, alphanumeric, 8-bit byte, and kanji mode supported.
- High-speed error correction by Berlekamp-Massey algorithm.
- Noise removal and distortion correction from origial images.
- Mass customization capability according to various needs.

GR-DataMatrix

DataMatrix Code Encode/Decode

Encode Features

- A wide range of DataMatrix types supported.
- ECC200 supported.
- ISO/IEC 16022 compliant.

DataMatrix Code Patterns

Square

Rectangular

Decode Features

- DataMatrix Code recognized and decoded from 8-bit monochrome images.
- Multiple Data Matrix code in images supported.
- ECC200 supported.
- ISO/IEC 16022 compliant.
- High-speed error correction by Berlekamp-Massey algorithm.
- Image rotation, rectangle, parallelogram distortion supported.
- Trapezoidal distortion caused by image depth supported.
- Evaluation project for VC8 included.

GR-BARCODE

One-dimensional Barcode Encode/Decode

Encode Features

- Various one-dimensional barcode supported.
  - JAN8/13(GS1-8 /13)
  - UPC-A / UPC-E
  - CODE39
  - ITF
  - NW-7(CODABAR)
  - CODE128 / EAN128 (GS1-128)
  - GS1 DataBar (one-dimensional)

Decode Features

- Various one-dimensional barcode supported.
  - JAN8/13(GS1-8 /13)
  - UPC-A / UPC-E
  - CODE39
  - ITF
  - NW-7(CODABAR)
  - CODE128 / EAN128 (GS1-128)
- One-dimensional barcode existing on 8-bit monochrome image lines can be recognized.
- Multiple barcode on the line from forward and reverse directions are supported.
- Logic resistant to various distortions.

※ CODE128/EAN128 carries restrictions.
Please contact us for the details of the speccifications.

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