Subject: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Lance on Tue, 05 Mar 2013 22:59:12 GMT
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2016-01-31 Support for ITF (interleaved 2 of 5) added.

2016-01-22 Attachment updated to accommodate change in UPP library (explicit selection of pick/clone) after introduction of C++11.

==========

First of all. Sorry to sergeynikitin. I noticed that you already implemented Code128. You are one of the more active U++ contributors, and I fully respect you. I did this a few years back but never took time to polish it, so I just use it myself.

Anyways:
see screenshot for effect. the usage is pretty intuitive. Supports both Draw class and QTF with pretty natural way.

File Attachments
1) Barcode20160131.zip, downloaded 701 times

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Tue, 05 Mar 2013 23:06:25 GMT
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File Attachments
1) barcode1.png, downloaded 2259 times



Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Wed, 06 Mar 2013 12:30:59 GMT
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Code128 is very compact, and supports full ASCII code set.

EAN13/UPC-A is widely used in retail. It might be desirable to add support for other EAN/UPC variations.

I have no use for other linear barcode.

PDF417 is very interesting, but there is no openly (freely) available documentation. (Unlike Code128 and EAN13 for which all details are available on Wiki). If anybody knows more details about PDF417 and is willing to share, please kindly let me know.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Thu, 07 Mar 2013 05:11:16 GMT
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Support for UPC-A and EAN8 added.

File Attachments
1) BarcodeTest.zip, downloaded 745 times

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by deep on Thu, 07 Mar 2013 06:25:07 GMT
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Hi Lance,

If this is useful for PDF417

http://sourceforge.net/projects/pdf417lib/

http://webpages.charter.net/jtlien/pdfdoc.html

http://grandzebu.net/informatique/codbar-en/pdf417.htm

http://sourceforge.net/projects/pdf417encode/

http://pdf417codec.sourceforge.net/

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Thu, 07 Mar 2013 14:14:00 GMT
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Thank you, Deepak. They are very good. First one is LGPL, so basically we can use it if we keep it as a dll or so. It also allows MPL, it is more relaxed?

Second one has some easily understandable information. It will be more helpful if I decide to implement it myself.

Will take time to go through other links.

Thanks again.

==========

The 3rd is fantastic! I am glad I asked. Fully appreciated, Deepak.

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Anonymous on Fri, 23 Aug 2013 08:03:29 GMT
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hello, gays, I am glad to be here. I know this forum is about barcode, I want you to help me solve my problem. I am going to use this EAN-8, I searched it by google, for I have little knowledge about it, I hope some of you can give me some useful suggestions, and help me know the advantages about it. Thanks a lot!!!

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Lance on Sun, 25 Aug 2013 03:05:38 GMT
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Hi Edgar:

I think EAN8 is just a short version of UPC/EAN. It's particularly good for smaller items, eg, gums, slim version of cigarettes. Other than that, there is not much advantage of it over the regular UPC/EAN. And apparently with 5 digit less, EAN8 is more limit in capacity.

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Anonymous on Wed, 28 Aug 2013 08:57:53 GMT
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hello, there is a source about code 128 and c++, I don't know whether it is useful for you, just check it , try to find what you really want , hope you like it.

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by acimage on Wed, 18 Sep 2013 02:24:03 GMT
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i konw a barcode generating software that can create various of barcodes for you and it is able to integrate into your .net application easily. barcodes created is in high quaility of high and low image resolution.
including Code128 EAN13 UPC-A EAN-8 and other barcode types.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Anonymous on Sun, 22 Sep 2013 06:58:48 GMT
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hello, glad to reply. I know a good PDF 417 source, share it there. as far as I am concerned, many users think highly of it, so, hope you like it,

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Tue, 12 Nov 2013 16:00:31 GMT
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Thanks Edgar. But I rarely need anything more than
http://grandzebu.net/informatique/codbar-en/pdf417.htm
from one of deep's previous post at present. For programmers seek to implement PDF417, that's a very good document.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Sat, 16 Nov 2013 01:12:18 GMT
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PDF417 support almost completed.

Anybody have document for QR/Data Matrix code available?

Thanks in advance.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by deep on Sat, 16 Nov 2013 10:20:39 GMT
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Hi

You can get some information from

This is original patent on QR code.
https://www.google.com/patents/US5726435

Specification
http://barcode-coder.com/en/datamatrix-specification-104.htm l

php code
http://barcode-coder.com/en/barcode-php-class-203.html

May be check zint and zxing codebase.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Sat, 16 Nov 2013 13:18:05 GMT

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Thank you deep. I prefer not to read code . I was getting stuck in doing the PDF417. There was some minor errors in the otherwise easy to follow documentation(whose link was provided by you), then I decided the Reed-Solomon algorithm might not be interpreted/implemented correctly. I thought I could get some clue from one of the library (whose link also provided by you) . But I ended up decoding barcodes generated by an online generator for given simple inputs to figure it out. Thank God, the basic data (the coefficients) provided in the website seems to be correct.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Sat, 16 Nov 2013 15:46:01 GMT
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Cannot wait to share

1. Encoding algorithm for Code128 reimplemented with greedy method
2. Fixed a bug with EAN check digit calculation.
3. There are known bugs/ommission with PDF417 but basically it should work most of the time(90%+?).

Note basic c++11 support (like the ones in VS2012) is required to compile the code.

File Attachments
1) BarcodeTest.zip, downloaded 708 times

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Sun, 17 Nov 2013 19:58:29 GMT
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For those who are interested in QR code, the reference 4 (this ISO specification) and 5 (a brief introduction for a understanding of the code) listed at the bottom of this page might be of some help.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Mon, 18 Nov 2013 00:06:52 GMT
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Got stuck again.

When I said there were know omissions, one of it in my mind is "Code Word 913 will switch to Octet(AKA byte) only for the next CW(code word)" mentioned in the reference webpage. The author didn't elaborate on it, I assume it should mean:
1. If the current compaction mode is Text, 913 will cause the next codeword be interpreted as

literal ASCII value, and the compaction mode for the codeword immediately after remains Text. Chance is, even the submode (UpperCase, LowerCase, Mixed, Punctuation) will be reserved;
2. If the current compaction mode is Byte, there will be no use for 913;
3. If the current compaction mode is Numeric, 913 will cause the next codeword be interpreted as literal ASCII value, and the compaction mode for the codeword immediately after remains Numeric.

If shortest encoding is a goal, it will not be achieved without taking the above into consideration. So I took time to implement above according to my assumption. Too bad, no online decoder will recognize barcode generated if 913-shift-to-Octet sequence existed in the codewords sequence. I was wondering if it's because the information was incorrect(author's mistake), or it wasn't interpreted correctly(my mistake), or it's because of a blind spot in the online decoders(somebody else to blame).

If somebody who has a decent barcode scanner that supports PDF417 could tell me the result of scanning the following barcode, it will be fully appreciated.

codeword sequence: 14 1 63 125 913 195 913 162 1 63 125 187 249 311 509 563 with the last 2 being error correction code words.

File Attachments

1) screen.png, downloaded 2318 times



Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by deep on Mon, 18 Nov 2013 06:20:04 GMT
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Hi,

I used PDF417.mobi on android.

Its not reading your image. It can read other PDF417 images available on net.

Your String is not converted properly by other two softwares.

http://grandzebu.net/informatique/codbar-en/pdf417.htm
http://www.bcgen.com/pdf417-barcode-creator.html

your String

Both convert to image which reads as
ABCDEF CDEFGHIJKL

Mostly string is not properly encoded by softwares.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Tue, 19 Nov 2013 02:02:11 GMT
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Hi Deepak:

Thanks for the feedback. UTF string might be interpreted differently in other encoding. Let's try a different example this time:

Text encoded: 0123456789012A0123456789012
Codewords sequence excluding error correction:902 15 386 694 721 112 913 65 15 386 694 721 112

File Attachments
1) screen.png, downloaded 2036 times



Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Tue, 19 Nov 2013 02:24:09 GMT
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And by the way, if I take away the 913-shift-to-octet patch, which is essentially the version in the BarcodeTest.zip posted on Nov. 16, the barcode generated can be readily accepted by http://online-barcode-reader.inliteresearch.com/. In its UTF version, exact same string is displayed. We can do without the 913-shift thing to be safe. All type of data will be properly encoded, only the encoding might not be optimum.

Subject: Re: [Barcode] Code128 & EAN13 (Superset of UPC-A) supported
Posted by Lance on Thu, 21 Nov 2013 03:24:46 GMT
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Here is a more authoritative reference:
http://www.expresscorp.com/content/express/pdf/IndustrySpeci fications/USS-PDF-417.pdf

Turns out 913 can only be used within Text Mode to shift to byte compaction for the next codeword, and then the original Text submode is restored. I don't see a reason why 913-shift is not allowed in Numeric context, but according the the standard, barcode for this text (

barcode associated with this text (0123456789012A0123456789012) is indeed invalid.

I have added Truncated pdf417 and some other functionalities. In order not to waste too much resources, I'll just keep it. Maybe until I at least make some progress on QR code.

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by makaveiljojo on Tue, 03 Dec 2013 09:18:29 GMT
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Thanks for all sharings. I was using a free online EAN8 generator that i wanna share too. It works very conveniently.

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Nana111 on Mon, 10 Mar 2014 06:32:31 GMT
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makaveiljojo wrote on Tue, 03 December 2013 10:18Thanks for all sharings. I was using a free online EAN8 generator that i wanna share too. It works very conveniently.
HI there
Thanks for your barcode sharing.I am exactly looking a free online barcode generator.I hope it is possible for my barcode generator to generate code 128 and upc-a at the same time.Is that ok?

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Giorgio on Fri, 22 Jan 2016 14:11:05 GMT
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Hi there,
if someone download this library and has issues compiling it, namely the following error:

Barcode\Code128.cpp(701): error C2280: 'Upp::Vector<Upp::byte> &Upp::Vector<Upp::byte>::operator =(const Upp::Vector<Upp::byte> &)': trying to reference a deleted function

you have to read here to fix it.
Regards,
Gio

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Lance on Fri, 22 Jan 2016 15:14:35 GMT
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Thanks, Giorgio. Attachment has been updated. See the first post.

Subject: Re: [Barcode] Code128 & EAN13/UPC-A/EAN8 supported
Posted by Lance on Sun, 31 Jan 2016 18:19:04 GMT
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Support for Interleaved 2 of 5 code added.