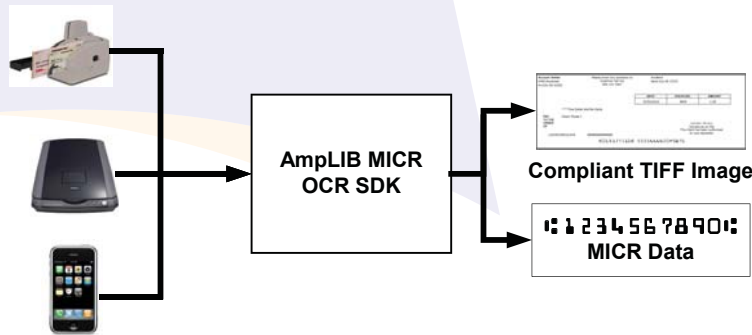




AmpLIB MICR OCR SDK

MICR Line Data Extraction, Image Processing and Image Formatting for Remote Deposit, Camera Images and Other Check 21 Applications

The X9 LIB MICR OCR SDK is a Windows™ .NET Software Development System.



AmpLIB MICR OCR SDK lets you quickly develop back-end applications for remote deposit and mobile capture of check images. The MICR OCR SDK includes image processing, MICR data extraction and image formatting functions that allow you to easily and accurately process incoming check images, prepare them for OCR, reliably extract the MICR data and format the final images ready for integration into ICL files for exchange.

BENEFITS

- Accurate MICR OCR provides high read rates with very low substitution error rates
- Licensed per machine with NO click charges. Licensing is based on features and performance options selected. Performance is scalable to hundreds of image processing functions per second per server
- Works with low quality images - low contrast and resolution, out of focus and distorted images - providing lowest possible image rejection rates
- Easy integration with your Check21 systems via .NET COM access or direct DLL calls. Demonstration apps and source code provided for C++, C# and VB NET

FEATURES

BASIC SDK FUNCTIONS

- File Load & Decompress
- Image Compress & Save
 - X9.100-181
 - UCD X9.100.187
- Image Scale/Rotation
- Bitonal, Grayscale, and Color Images

OCR A/B

- For Coupons & Remittance Documents

MICR OCR (E13B Font)

- MICR Line Detection
- Reads E13B Font
- Upside Down Read
- ABA MICR Line Formats

IMAGE REPAIR/PREP

- Find Document Images
- Skew Correction/Crop
- Speckle, Streak, Border and Line Removal
- Background Removal
- Edge Detection
- Dynamic Threshold
- Page Mode to Read Checks on a Larger Document

CAMERA GROUP

- Optimized MICR Fonts for Cell Phone Images
- Character-by-Character Voting

MICR VERIFY/PARSE

- Verify MICR Data
- Parse MICR Data to Fields

ADVANCED FUNCTION CALLS

- Single Call to
 - Extract MICR Data
 - Output Exchange-Ready Images

ALL MY PAPERS MICR OCR SDK

The AmpLIB MICR OCR SDK finds, reads, extracts, parses and verifies MICR data from check images as well as converting color and grayscale check images to exchange compliant TIFF images for incorporation into ICL files for exchange.

AmpLIB MICR OCR SDK Features

File Load & Decompress

AmpLIB

IMAGE COMPRESS & SAVE - X9.100-181 & UCD X9.100.187 Compatible Images

- Image Scale/Rotation
- Bitonal, Grayscale and Color Images

OCR A/B

For Reading of Coupon and Remittance Documents

MICR OCR (E13B)

- MICR Line Detection
- Reads E13B Font
- Upside Down Read
- ABA MICR Line Formats

IMAGE REPAIR/IMAGE PREP

- Find Document Images
- Skew Correction/Crop
- Speckle, Streak, Border and Line Removal
- Morphological Image Filters for Background Removal
- Laplacian Filters for Improved Edge Detection
- Dynamic Threshold for Color or Grayscale to B&W Conversion
- Page Mode to Find and Read Checks on a Remittance Page

CAMERA GROUP

- Uses Trained Fonts from Camera Based Images Such as Those From Cell Phones
- Character Level Multiple Engine Voting as Opposed to Line Level Voting
- Improves Performance of Existing Applications Using AmpLIB MICR OCR with No Code Changes

MICR VERIFY/PARSE

- Verify Captured MICR Data
- Parse MICR Data to Field Level (R/T, ON-US, AUX ON-US, etc.)

ADVANCED FUNCTION CALL LIBRARY

- AmpReadMircamera & AmpReadCamera
 - Single-Calls that Extract MICR Data & Output Exchange-Compliant Images
 - Combines Many of the Above Processes to Provide Highest Read Rates, Lowest Substitution Rates and Best Possible Throughput
- AmpReadScannerForChecks
 - Single Call that Extracts MICR Data & Outputs Exchange Compliant Images from Scanned Images Including Those From Remittances.

SPEED AND PROCESSOR OPTION LICENSES All options are available for single and multi core processors at speeds ranging from 0.5 to 1280 images per second per server. Speed licenses determine the theoretical maximum throughput of an application. Actual performance will vary depending on hardware, image quality, number of functions called and other factors.

RUNTIME LICENSING Deployment of applications using AmpLIB MICR OCR SDK will require the purchase of runtime licenses for the function groups used by your application, for each server deployed.

MINIMUM SYSTEM REQUIREMENTS

Windows 10 or Server 2008 or Later, 32/64 Bit. Pentium, RAM per OS Requirements
Windows is a registered trademark of Microsoft Corporation in the United States and other countries.