PART ONE：DigitNoteController Interface

----------DG----------

1.

-(int)openPort();	
parameter	nil
Return type	int
Description	open DG BLE port

Example	int Ret = openPort() ;
	if (Ret == 0)
	{
	//openPort Success
	}
	else
	{
	//openPort Fail，Please refer to the error code reference table
	}

2.

-(int)getDGBleInfo(char * dgBleName, char * dgBleMac)	
parameter	(char*) dgBleName (char*) dgBleMac
Return type	int
Description	get dgBleName and dgBleMac

Example	char dgBleName[20];
	char dgBleMac[20];
	int Ret = getDGBleInfo(dgBleName, dgBleMac) ;
	if (Ret == 0)
	{
	//getDGBleInfo Success
	}
	else
	{
	//getDGBleInfo Fail，Please refer to the error code reference table
	}

3.

-(int) getDGVersion(char * dgVersion);	
parameter	(char*) DGVersion
Return type	int
Description	get DGVersion

Example	char DGVersion[20];
	int Ret = getDGVersion(DGVersion) ;
	if (Ret == 0)
	{
	//getDGVersion Succ ess
	}
	else
	{
	//getDGVersion Fail，Please refer to the error code reference table
	}

4.

-(int)setDGBleName(char * deBleName);	
parameter	(char *)deBleName
Return type	int
Description	set DGBleName(DGBleName length must less than or equal to 16)

Example	LONG Ret = setDGBleName(deBleName)
	If (Ret == 0)
	{
	//setDGBleName Success
	}
	else
	{
	//setDGBleName Fail，Please refer to the error code reference table
	}

5.

-(int)connectDevice();	
parameter	Nil
Return type	int
Description	connect to Device, this is an **asynchronous** interface,if connecting successfully,SDK would call delegate function OnProgressCallbackForConnectDeviceSuccess(char * deviceBleMac, char * deviceBleName);

Example	Int Ret = connectDevice();
	If (Ret == 0)
	{
	//connectDevice Success

	else
	{
	//connectDevice Fail，Please refer to the error code reference table
	}

Delegate	OnProgressCallbackForConnectDeviceSuccess(char * deviceBleMac, char * deviceBleName); SetCallBackForConnectDeviceSuccess(*OnProgressCallbackForConnectDeviceSuccess); deviceBleMac: Device BLE Mac deviceBleName: Device BLE Name

6.

-(int) connectDeviceByMac(char * macAddr);	
parameter	(char*)macAddr
Return type	int
Description	connect to Device by macaddr, if connect successful,use (void)onConnectDeviceSuccess(LPCTSTR deviceBleMac, LPCTSTR deviceBleName) to get deviceBleMac and deviceBleName

Example	char macAddr[20] ;
	Int Ret = connectDevice (madAddr);
	If (Ret == 0)
	{
	//connectDevice Success
	else
	{
	//connectDevice Fail，Please refer to the error code reference table
	}

Delegate	OnProgressCallbackForConnectDeviceSuccess(char * deviceBleMac, char * deviceBleName); SetCallBackForConnectDeviceSuccess(*OnProgressCallbackForConnectDeviceSuccess); deviceBleMac: Device BLE Mac deviceBleName: Device BLE Name

7.

-(int) disconnectDevice(char * deviceBleMac, char * deviceBleName);	
parameter	(char*) deviceBleMac (char) deviceBleName
Return type	int
Description	disconnect to Device

Example	char deviceBleMac [20];
	char deviceBleName[20];
	int Ret = disconnectDevice(deviceBleMac, deviceBleName) ;
	If (Ret == 0)
	{
	//disconnectDevice Success

	}
	else
	{
	//disconnectDevice Fail，Please refer to the error code reference table
	}

8.

-(int) searchDevice();	
parameter	Nil
Return type	int
Description	Search device

Example	int Ret = searchDevice() ;
	If (Ret == 0)
	{
	//searchDevice Success
	}
	else
	{
	//searchDevice Fail，Please refer to the error code reference table
	}

Delegate	OnProgressCallbackForSearchDevice(char * deviceBleMac, char * deviceBleName, int rssi) deviceBleMac: Device BLE Mac deviceBleName: Device BLE Name rssi: Received Signal Strength Indicato

----------Device----------

1.

-(int) getDeviceBleInfo(char * deviceBleMac, char * deviceBleName);	
parameter	(char*) deviceBleMac (char*) deviceBleName
Return type	int
Description	get deviceBleMac and deviceBleName

Example	char deviceBleMac[20];
	char deviceBleName[20];
	int Ret = getDeviceBleInfo(deviceBleMac, deviceBleName) ;
	If (Ret == 0)
	{
	//getDeviceBleInfo Success
	}
	else
	{
	// getDeviceBleInfo Fail，Please refer to the error code reference table
	}

2.

-(int) getDeviceName(char * deviceName);	
parameter	(char*) deviceNamep
Return type	int
Description	get deviceName

Example	char deviceNamep[20];
	int Ret = getDeviceName(deviceName) ;
	If (Ret == 0)
	{
	// getDeviceName Success
	}
	else
	{
	// getDeviceName Fail，Please refer to the error code reference table
	}

3.

-(int) getDeviceFirmwareVersion(char * bleVersion, char * mcuVersion);	
parameter	(char*) bleVersion (char*) mcuVersion
Return type	int
Description	get bleVersion and mcuVersion

Example	char bleVersion[20];
	char mcuVersion[20];
	int Ret = getDeviceFirmwareVersion() ;
	If (Ret == 0)
	{
	// getDeviceFirmwareVersion Success
	}
	else
	{
	// getDeviceFirmwareVersion Fail，Please refer to the error code reference table
	}

4.

-(int) getDeviceBatteryState(int & batteryPercentage, int & batteryState);	
parameter	(int) batteryPercentage (int) batteryState
Return type	int
Description	get batteryPercentage(0% - 100%) and batteryState(0 = Not Charging，1 = Charging)

Example	int batteryPercentage;
	int batteryState;
	int Ret = getDeviceBatteryState(batteryPercentage, batteryState);
	If (Ret >= 0)
	{
	// getDeviceBatteryState Success
	}
	else
	{
	// getDeviceBatteryState Fail，Please refer to the error code reference table
	}

5.

-(int) setDeviceDateTimeWithSecond(int dataTimeWithSecond);	
parameter	(int)dataTimeWithSecond
Return type	int
Description	set dataTimeWithSecond

Example	LONG Ret = setDeviceDateTimeWithSecond(dataTimeWithSecond) ;
	If (Ret >= 0)
	{
	// setDeviceDateTimeWithSecond Success
	}
	else
	{
	// setDeviceDateTimeWithSecond Fail，Please refer to the error code reference table
	}

6.

-(int) setDeviceName(char * deviceName);	
parameter	(char∗)deviceName
Return type	int
Description	set DeviceName(DeviceName length must less than or equal to 12)

Example	int Ret = setDeviceName(DeviceName) ;
	If (Ret == 0)
	{
	// setDeviceName Success
	}
	else
	{
	// setDeviceName Fail，Please refer to the error code reference table
	}

7.

-(int) hardwareReset ()	
parameter	Nil
Return type	int
Description	reset device hardware

Example	int Ret = hardwareReset ();
	If (Ret == 0)
	{
	// hardwareReset Success
	}
	else
	{
	// hardwareReset Fail，Please refer to the error code reference table
	}

8.

-(int) factoryReset ()	
parameter	Nil
Return type	int
Description	reset device and clean data

Example	int Ret = factoryReset ();
	If (Ret == 0)
	{
	// factoryReset Success
	}
	else
	{
	// factoryReset Fail，Please refer to the error code reference table
	}

9.

-(int) getDeviceSN (char * deviceSN)	
parameter	(char*)deviceSN
Return type	int
Description	get DeviceSN

Example	char deviceSN[20];
	int Ret = getDeviceSN(deviceSN);
	
	If (Ret == 0)
	{
	// getDeviceSN Success
	}
	else
	{
	// getDeviceSN Fail，Please refer to the error code reference table
	}

10.

-(int) scanBinaryCode(int & iBinaryCode)	
parameter	(int&) iBinaryCode
Return type	int
Description	scan binarycode

Example	int Ret = scanBinaryCode(iBinaryCode);
	If (Ret == 0)
	{
	// scanBinaryCode Success
	}
	else
	{
	// scanBinaryCode Fail，Please refer to the error code reference table
	}

----------Realtime Mode----------

1.

-(int) switchToRealTimeMode ()	
parameter	Nil
Return type	int
Description	set device as real time mode After set real time mode, user can get real time point in (void)onRealTimePenData(LONG x, LONG y, LONG preasure)

Example	int Ret = switchToRealTimeMode ();
	If (Ret == 0)
	{
	// switchToRealTimeMode Success
	}
	else
	{
	// switchToRealTimeMode Fail，Please refer to the error code reference table
	}

Delegate	(void) OnProgressCallbackForRealTimePenDatas (int x, int y, int preasure) SetCallBackForRealTimePenDatas(*OnProgressCallbackForRealTimePenDatas) x: X-coordinate y: Y-coordinate preasure: stylus pressure

----------Upload Mode----------

1.

-(int) switchToUploadMode()	
parameter	Nil
Return type	int
Description	set device as upload mode

Example	Int Ret = switchToUploadMode() ;
	If (Ret == 0)
	{
	// switchToUploadMode Success
	}
	else
	{
	// switchToUploadModeFail，Please refer to the error code reference table
	}

2.

-(int) queryFileConut(int & fileConut);	
parameter	(int&) fileCount
Return type	int
Description	query file count on device

Example	Int fileConut;
	Int Ret = queryFileConut (fileConut) ;
	If (Ret == 0)
	{
	//queryFileConut Success
	}
	else
	{
	// queryFileConut Fail，Please refer to the error code reference table
	}

3.

-(int) transferOldestFile()	
parameter	Nil
Return type	int
Description	ask oldest file in device

Example	Int Ret = transferOldestFile() ;
	If (Ret == 0)
	{
	// transferOldestFile Success
	}
	else
	{

	// transferOldestFile Fail，Please refer to the error code reference table
	}
	
	//maybe return -5 if the key failure

Delegate	OnProgressCallbackForUploadFileStatus (int speed, int percentage, int totalSize) SetCallBackForUploadFileStatus(*OnProgressCallbackForUploadFileStatus) speed: transfer speed (bytes/s) percentage: transmission percentage (0% - 100%) totalSize: the raw data size of request file(bytes)

4.

-(int) transferNewestFile()	
parameter	Nil
Return type	Int
Description	ask newest file in device

Example	int Ret = transferNewestFile () ;
	If (Ret == 0)
	{
	// transferNewestFile Success
	}
	else
	{
	// transferNewestFile Fail，Please refer to the error code reference table
	}
	//maybe return -5 if the key failure

Delegate	OnProgressCallbackForUploadFileStatus (int speed, int percentage, int totalSize) SetCallBackForUploadFileStatus(*OnProgressCallbackForUploadFileStatus) speed: transfer speed (bytes/s) percentage: transmission percentage (0% - 100%) totalSize: the raw data size of request file(bytes)

5.

-(int) getUploadFileInfo(int & fileSize, int & fileDateTime)	
parameter	(int&)fileSize (int&)fileDat2Time
Return type	int
Description	when event onUploadFileStatus finish(percentage = 100%),call this function to get fileSize and fileDateTime
Example	Int int Ret = getUploadFileInfo (fileSize, fileDateTime) ;

	If (Ret == 0)
	{
	// getUploadFileInfo Success
	}
	else
	{
	// getUploadFileInfo Fail，Please refer to the error code reference table
	}

6.

-(int) stopTransfer()	
parameter	Nil
Return type	int
Description	stop file transfer

Example	LONG Ret = stopTransfer() ;
	If (Ret == 0)
	{
	// stopTransfer Success
	}
	else
	{
	// stopTransfer Fail，Please refer to the error code reference table
	}

7.

-(int) GetUploadFile()	
parameter	Nil
Return type	int
Description	get upload file

Example	int Ret = stopTransfer () ;
	If (Ret == 0)
	{
	// GetUploadFile Success
	}
	else
	{
	// GetUploadFile Fail，Please refer to the error code reference table
	}

Delegate	OnProgressCallbackForUploadFilePenData (int x, int y, int preasure) SetCallBackForUploadFilePenData(*OnProgressCallbackForUploadFilePenData) x: X-coordinate y: Y-coordinate

	preasure: stylus pressure

8.

-(int) deleteUploadFile ()	
parameter	Nil
Return type	Int
Description	delete upload file in device

Example	int Ret = deleteUploadFile () ;
	If (Ret == 0)
	{
	// deleteUploadFileSuccess
	}
	else
	{
	// deleteUploadFile Fail，Please refer to the error code reference table
	}

----------File Encryption----------

1.

-(int) openFileEncryptionWithKey(char * key);	
parameter	(char *)key
Return type	int
Description	open device file encryption function

Example	int Ret = openFileEncryptionWithKey(key)
	If (Ret == 0)
	{
	// openFileEncryptionWithKey Success
	}
	else
	{
	// openFileEncryptionWithKey Fail，Please refer to the error code reference table
	}
	
	// Note :Deive will restart, interface maybe return -3

2.

-(int) closeFileEncryptionByKey(char * key)

parameter	(char *)key
Return type	int
Description	close device file encryption function

Example	Int Ret = closeFileEncryptionByKey(key)
	If (Ret == 0)
	{
	  // closeFileEncryptionByKey Success
	}
	else
	{
	  // closeFileEncryptionByKey Fail，Please refer to the error code reference table
	}
	
	// Note :Deive will restart, interface maybe return -3

3.

-(int) queryFileEncryptionStatus(int & FileEncryptStatus);	
parameter	Nil
Return type	int
Description	query FileEncryptStatus(0 = file unencrypted, 1 = file encrypted)

Example	Int FileEncryptStatus;
	int Ret = queryFileEncryptionStatus (FileEncryptStatus)
	If (Ret == 0)
	{
	  // queryFileEncryptionStatus Success
	}
	else
	{
	  // queryFileEncryptionStatus Fail，Please refer to the error code reference table
	}

4.

-(int) verifyFileEncryptionByKey(char * key);	
parameter	(char *)key
Return type	int
Description	verify the file encryption system per 30 minutes by using the key which you set.

Example	int Ret = verifyFileEncryptionByKey(key)
	If (Ret == 0)
	{
	  // verifyFileEncryptionByKey Success
	}
	else

	{
	// verifyFileEncryptionByKey Fail，Please refer to the error code reference table
	}

---------- error code reference table----------

error code reference table		
Ret	**Symbol**	**instruction**
0	DigitNoteController_OK	The request is successful
-1	DigitNoteController_SYSERR	System error
-2	DigitNoteController_TIMEOUT	The request timeout
-3	DigitNoteController_NOSESPONSE	Device did not respond,maybe device is restarting
-4	DigitNoteController_INVAILD	Illegal request, maybe parameter is not correct
-5	DigitNoteController_KEYERR	Verify key error or the key failure,plesase call the interface verifyFileEncryptionByKey

PART TWO: DigitNoteController WARNING

1. in order to ensure the pen-data sequently, callback-function would be executed one by one, and may be executed ten thousand times per second. So please do not perform high time-consuming operation in callback-function, and inhibit to call library interface in callback-function.