S3C6410 Mango6410 (망고64 WinCE 6.0) Release 2012-04-10

수정 부분

- 1) 7인치 LCD 드라이버 수정
- 2) 1.3M Camera 드라이버 포함
- 3) 이더넷, GPS드라이버 포팅 완료

베이스 소스

(mango64 s3c6410 & Wince) mango64 Wince 2010-10-14 BSP 소스(WiFi,GPS,카메 라,이더넷)

http://cafe.naver.com/embeddedcrazyboys/8514

(Window CE)Mango64 & 7 인치 LCD 구동 모습 및 Binary

http://cafe.naver.com/embeddedcrazyboys/6599

다운로드

http://crztech.iptime.org:8080/Release/mango64/wince/mango64-wince-2010-10-14.zip

mango64-wince-2010-10-14.zip 압축을 풀면 CB6410, COMMON 파일이 있습니다.

СВБ410	Соммон	
"C:₩WINCE600₩PLATFORM" 에 풀어줍니다.		
· 주소(D) C:₩WINCE600₩PLATFORM 파일 및 폴더 작업		▼ → 미동 변결
(Window CE)Mango64 & 7 인치 LCD - <u>http://cafe.naver.com/embeddedcrazyboys/659</u> 위를 참조하여 소스를 수정해줍니다.	구동 모습 및 Binary <u>9</u>	

Visual Studio를 실행 합니다.



File > New > Project를 선택해줍니다.

9	🗱 Start Page – Microsoft Visual Studio										
	<u>F</u> ile	e <u>E</u> dit	<u>V</u> iew	<u>P</u> roject	Ta <u>r</u> ge	t j	<u>T</u> ools	<u>W</u> indow	<u>C</u> ommunity	<u>H</u> elp	
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1		<u>O</u> pen			•	•	<u>F</u> ile		Ctrl+	N	
i		<u>C</u> lose					Proje	ct From <u>E</u> x	isting Code		
Π	a	Close S	Solution								

New Project					
Project types: → Visual C++ → ATL → CLR → General → MFC → Smart De → Win32 → Other Langu → Other Project → Platform Bui	vice ages t Types der for CE 6,0 Lemplates: Implates Implate				
A project for crea	ating a Windows Embedded CE 6,0 operating system				
<u>N</u> ame:	WinCE_Mango64_120329				
Location:	C:\WINCE600\OSDesigns				
Solution Na <u>m</u> e:	WinCE_Mango64_120329 Create directory for solution				
	OK Cancel				

Platform Builder for CE 6.0선택 후 OS Design을 선택한 후에 아래에 Project명을 정해줍니다. 그 후 Ok를 클릭



Next 클릭

Windows Embedded CE 6.0 OS Design Wizard ?X							
Board Support Packages							
Available BSPs: Aruba Board: ARMV4I ✓ Mangob4 CB6410:S3C6410 CEPC: x00 Device Emulator: ARMV4I H4Sample OMAP2420: ARMV4I ITSC100: S5PC100 Mainstonelli PXA27X: ARMV4I SMDKV210: ARMV4I	A BSP contains a set of device drivers that are added to your OS design. Select one or more BSPs for your OS design, Note: Only BSPs supported by installed CPUs are displayed in the list.						
< <u>Prev</u>	ious Next > Einish Cancel						

"Mango64:CB6410" 선택 후 Next클릭



"PDA Device" 선택 후 Next클릭

Windows	Embedded CE 6.0 OS Design Wizar	t 💽 🔁
N	Design Template Variants	
Variants:	andheld e Web Pad	Mobile Handheld
	< <u>P</u> revious	Next >EinishCancel

"Mobile Handheld" 선택 후 Next클릭



".NET Compact Framework 2.0, Active Sync,Internet Browser,Quarter VGA Resoures-Portrait Mode, Windows Media Audio/MP3, Windows Messenger, Word pad" 를 선택했습니다. 원하는 것을 선택하고 Next클릭

Windows Embedded CE 6.0 OS Design Wizar	d ? 🔀
Networking _Communications	
Image: Construction of the system Image: Construction of the system	The Internet standard protocol, version 6,
<pre> <u> </u></pre>	<u>N</u> ext > <u>F</u> inish Cancel

Networking Communications에서

"TCP/IPv6 Support", "Local Area Network", "Personal Area Network" 선택 후 Next클릭



Finish 클릭

6	Catalog Item Notification	X			
	OBEX Server	^			
	Security Warning				
	Security Warning	Ξ			
	Under certain circumstances, the Object Exchange Protocol (OBEX) catalog item can compromise the security of your platform. This catalog item poses the following potential security risks:				
 If proper security and authentication techniques are not used, a service that interferes with services.exe can be installed. 					
	 If proper encryption techniques are not used, OBEX running over Bluetooth could expose data packets to third parties. 				
	To learn more about potential OBEX security risks, as well as the best practices for using this catalog item more securely, see the following topics:				
	OBEX Security				
	Enhancing the Security of a Device	<u>×</u>			
	Acknowledge Cancel				

Catalog Items View	→ ‡ ×
🖆 Filter 👻 🛐 🛛 <search></search>	- 🛃
CB6410-V01 BSP Core OS Device Drivers Third Party	
🞝 솔루션 탐색기 🍗 Catalog Items View	死 클래스 뷰

Release 모드로 Build 환경 변경합니다.



🐢 Wi	nCE_	Mango	64_1203	329 - N	licrosof	t Visua	l Studio)					
<u>F</u> ile	<u>E</u> dit	⊻iew	<u>P</u> roject	<u>B</u> uild	<u>D</u> ebug	Ta <u>r</u> get	<u>T</u> ools	VMwa <u>r</u> e	<u>W</u> indow	<u>C</u> ommunity	<u>H</u> elp		
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1 a (6 D	10 M						Mango64 Mango64	CB6410_S	3C6410 Debug 3C6410 Releas	se internet		
Catalo	g Item	s View						Configura	ation Mana	iger Faye			🗕 🗙 👘
📔 Fil	ter 👻	2 <	Search>					- 🗲					Se Se



Catalog Items View 화면의 "Core OS -> CEBASE -> File Systems and Data Store" 에서 File System - Internal -> RAM and ROM File System 선택 Registry Storage -> RAM-based Registry 선택 -> Hive-based Registry 선택할 경우엔 CB6410.bat 파일에서 "set IMGHIVEREG" -> "set IMGHIVEREG=1" 로 수정 Storage Manager-Binary Rom Image file System 선택 Storage Manager-exFAT File System 선택 Storage Manager-Storage Manager Control Panel Applet 선택 1) Binary Rom Image File System을 선택하면, 어떤 역할을 하는지 살펴 보겠습니다. <u>http://msdn.microsoft.com/en-us/library/ms885244.aspx</u> 에 관련된 내용이 있습니다.

파일은 c:₩WINCE600₩PLATFORM₩CB6410₩FILES₩platform.reg 파일에서 확인 할 수 있 습니다.

[HKEY_LOCAL_MACHINE#System#StorageManager#Profiles#NANDFLASH]

"DefaultFileSystem"="BINFS" "PartitionDriver"="mspart.dll" "Name"="Microsoft Flash Disk"

[HKEY_LOCAL_MACHINE₩System₩StorageManager₩Profiles₩NANDFLASH₩BINFS] "MountHidden"=dword:1 "MountAsROM"=dword:1

2) exFAT File System 은 http://msdn.microsoft.com/en-us/library/aa914663.aspx http://msdn.microsoft.com/en-us/library/aa914353.aspx

에서 참고 하시면 됩니다. Wince 6.0 에서 새롭게 추가된 파일 시스템입니다. 자세한 것은 잘 모르겠습니다.

3) Storage Manager-Storage Manager Control Panel Applet은 http://msdn.microsoft.com/en-us/library/ee478949.aspx http://msdn.microsoft.com/en-us/library/ms885457.aspx

참고 바랍니다.

X86 BSP로 되어 있습니다. Hard disk 관련 내용인 것 같습니다.

 4) TFAT(Transaction-Safe FAT File System) File System 은 <u>http://msdn.microsoft.com/en-us/library/ms885457.aspx</u> 에서 참고 바랍니다. 말 그대로, 전송간에 충돌이 나지 않도록 하는 역할을 합니다.



선택

Media-Video Codecs and Renderers-WMV/MPEG-4 Video Codec 선택

Media-Windows Media Player 선택

1) Direct3D Mobile은 <u>http://msdn.microsoft.com/en-us/library/aa452478.aspx</u> 참고하기

바랍니다.

- 2) DirectDraw 은 <u>http://msdn.microsoft.com/en-us/library/aa919851.aspx</u> 에 자세히 나 와 있습니다.
- 3) WMV/MPEG-4 Video Codec 은 <u>http://msdn.microsoft.com/en-us/library/aa451458.aspx</u>
- 4) Windows Media Player 는 기본 디폴트로 넣도록 하겠습니다.







http://msdn.microsoft.com/en-us/library/ee482478.aspx 에 있습니다.

소스는

Source code for the SD bus can be found in the following directories:

- SD 1.1 bus %_WINCEROOT%\Public\Common\OAK\Drivers\SDCard\SDBusdriver
- SD 2.0 bus %_WINCEROOT%\Public\Common\OAK\Drivers\SDCard\SDBus



Device Drivers->Networking->Personal Area Networking(PAN) devices-.>

Serial Infrared(SIR)선택

Prorject > OSDesign1 Properties.... 클릭



6410_CE60 Property Pages		?X
Configuration: Active(SMDK6410	ARMV4I Rel 🕑 Platform: N/A	Configuration Manager
 Common Properties Build Tree (WINCEROOT Configuration Properties General Locale Build Options 	Locales: ☐ 영어 (남아프리카 공화국) ☐ 영어 (뉴질랜드) ☑ 영어 (미국) ☐ 영어 (벨리즈)	Cl <u>e</u> ar All
– Environment – Custom Build Actions – Subproject Image Setting	Default locale: 영어 (미국)	×
	Codepages: 437 (OEM - United States) 708 (Arabic - ASMO 708) 720 (Arabic - Transparent ASMO) 737 (OEM - Greek 437G)	Cle <u>a</u> r All
	✓ Localize the <u>b</u> uild ☐ Strict localization checking in the build	
		확인 취소 적용(<u>A</u>)

Configuration Proerties->Locale "에서

"Locales"에서 Clear all 한 후 "영어","한국어" 선택

"Default locale"에서 "한국어"선택

6410_CE60 Property Pages ?X
Configuration: Active(SMDK6410 ARMV4I Rel) Platform: N/A Configuration Manager Configuration Properties Build Tree (WINCEROT Build options: Build reacked events in RAM (IMGOSCAPTURE=1) Configuration Properties General Docale Build Options Build options Build Actions Enable event tracking during boot (IMGCELOGENABLE=1) Custom Build Actions Enable kernel debugger (no IMGNOKELE=1) Enable kernel debugger (no IMGNOKELE=1) Enable setting Enable ship build (WINCESHIP=1) Enable ship build (WINCESHIP=1) Enable ship build (WINCESHIP=1) Enable ship build (WINCESHIP=1) Build very instead of links to populate release directory (BUILDREL_USE_COPY=1) Write run-time image to flash memory (IMGFLASH=1)
확인 취소 적용(<u>A</u>)

Configuration Proerties ->Build Options" 선택 "Enable KITL(no IMGNOKITL=1)" 체크하지 마세요.

🏶 WinCE_Mango64_120329 - Mi	cro	soft Visual Studio				
<u>F</u> ile <u>E</u> dit Project <u>V</u> iew <u>P</u> roject	<u>B</u> u	ild <u>D</u> ebug Ta <u>r</u> get <u>T</u> ools VMwa <u>r</u> e <u>W</u> in				
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Solution Explorer - WinCE_Mango64_120		Rebuild Solution Ctrl+Alt+F7				
		<u>C</u> lean Solution				
😡 Solution 'WinCE_Mango64_120329' (Build WinCE_Mango64_120329				
i⇒		Rebuild WinCE_Mango64_120329				
		Clean WinCE_Mango64_120329				
🖮 📴 ARUBABOARD		Advanced Build Commands				
		Build All Sub <u>p</u> rojects				
		Rebuild All Subprojects				
		Build All SDKs				
		Copy <u>F</u> iles to Release Directory				
B SMDKV210		Ma <u>k</u> e Run-Time Image				
	<u>c:\</u>	Open Release <u>D</u> irectory in Build Window				
		Global Build Settings				
 Parameter Files SDKs Subprojects 		Targeted Build <u>S</u> ettings				
		Batch Build				
		Configuration Manager				

Build > Build Solution 클릭



위처럼 빌드가 됩니다.

빌드 완료 후

c:₩WINCE600₩OSDesigns₩wince_mango64_120329₩RelDir₩Mango64_CB6410_Release₩ stepIdr,eboot,nk 이미지가 만들어 집니다.