

Digging HTC Touch



Deassembly: More hardware design thinking

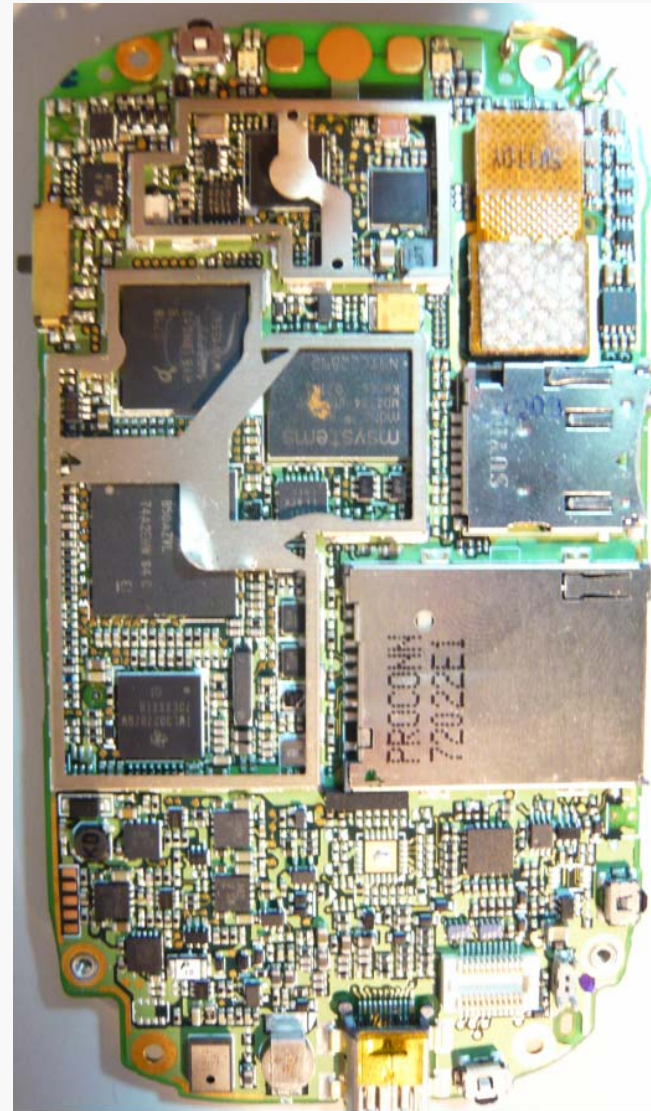
Openmoko
open. mobile. free.

HTC Touch at a glance

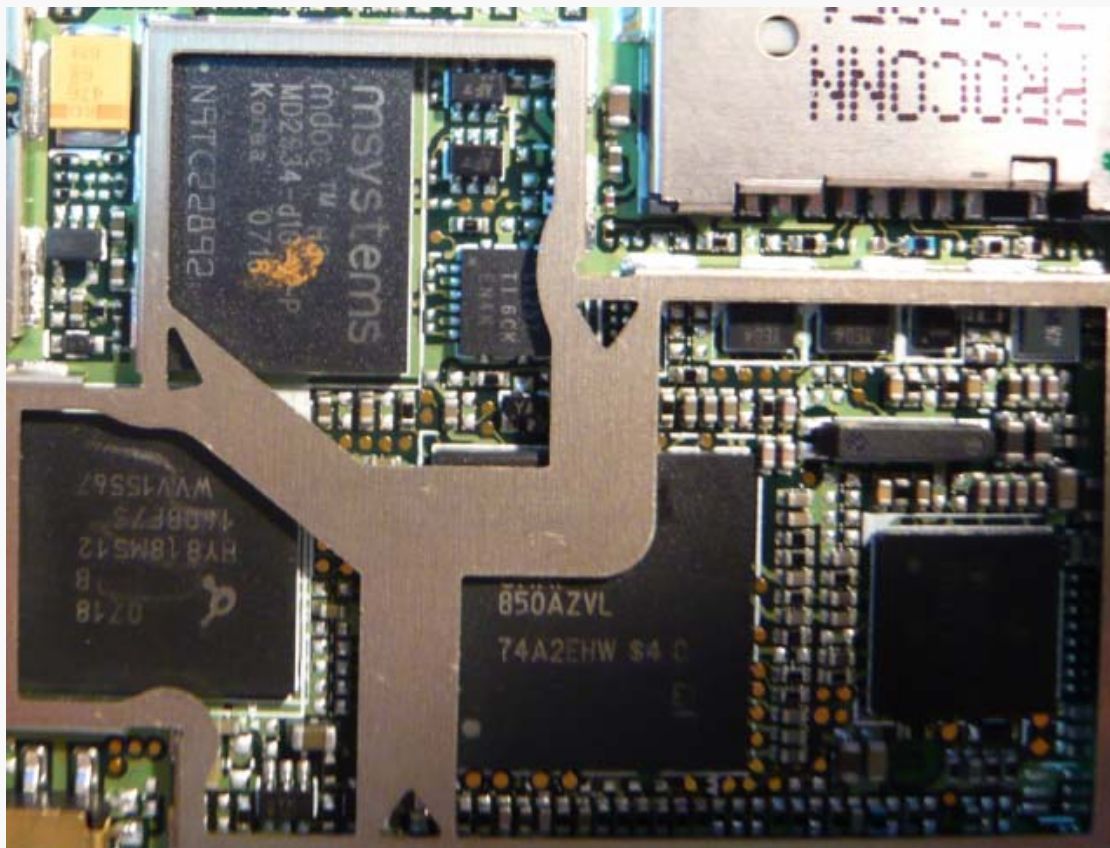


Available:	Q3 2007
Network:	GSM 900/1800/1900
Data:	GPRS + EDGE + WIFI
Screen:	240x320 pixels, 65k colours, QVGA
Camera:	2 megapixels FF
Size:	Compact PDA-style device 100 x 58 x 14mm / 112 grams
Bluetooth:	Yes
Memory Card:	microSD
Infra-red:	No
Polyphonic:	Yes
Java:	Limited
Battery life:	5 hours talktime / 8 days standby

Inner touch

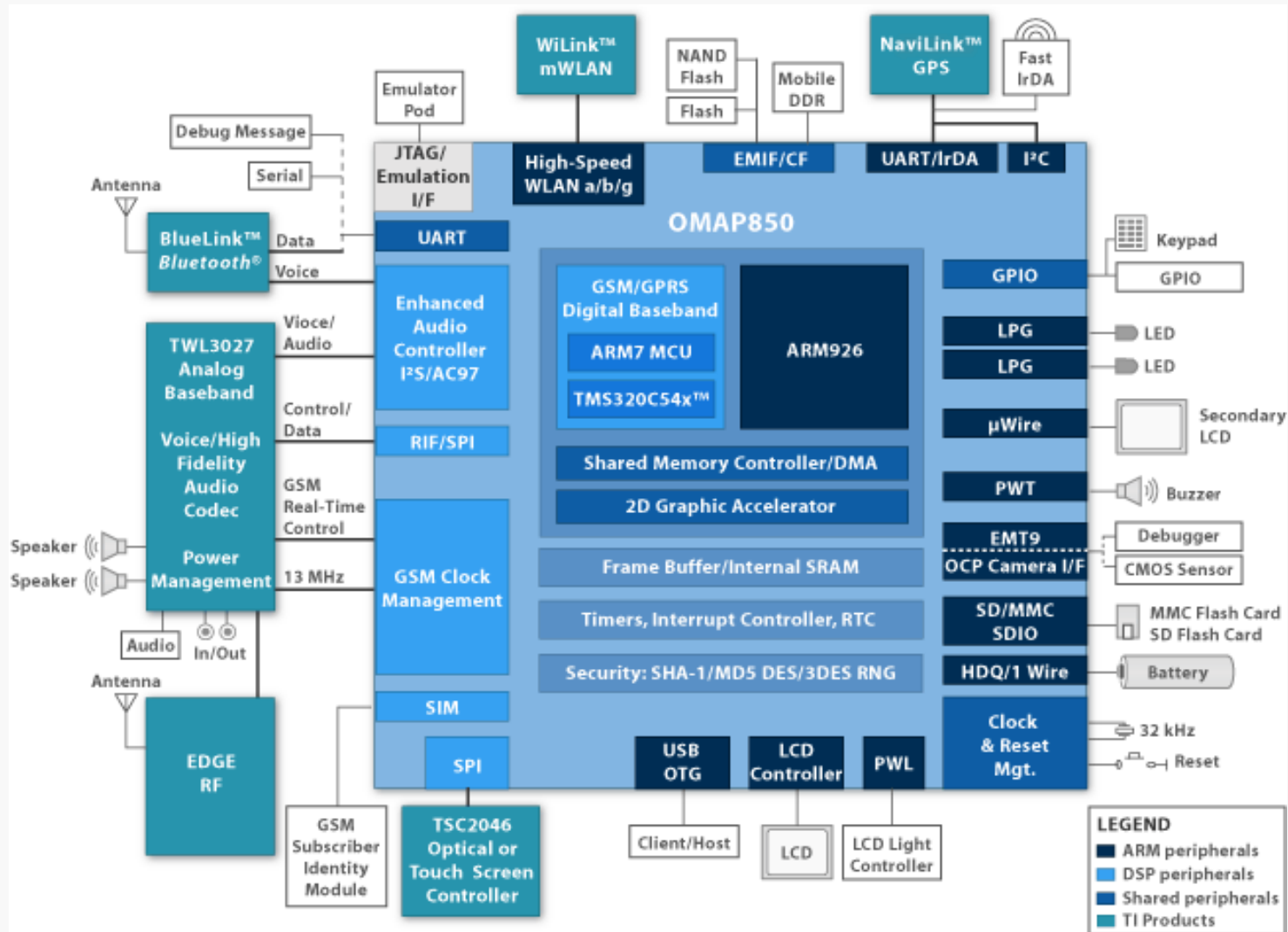


Touch Engine



MCU	TI OMAP 850(ARM9 198MHz) +GSM DBB-G2 (ARM7)
NAND	Msystems 4bit MLC (128MB)
DDR	Qimonda 133 MHz 4 Banks × 8 Mbit × 16 Low Power 1.8V (64MB)
ABB	TI TWL3027(Syren)

OMAP 850 Block

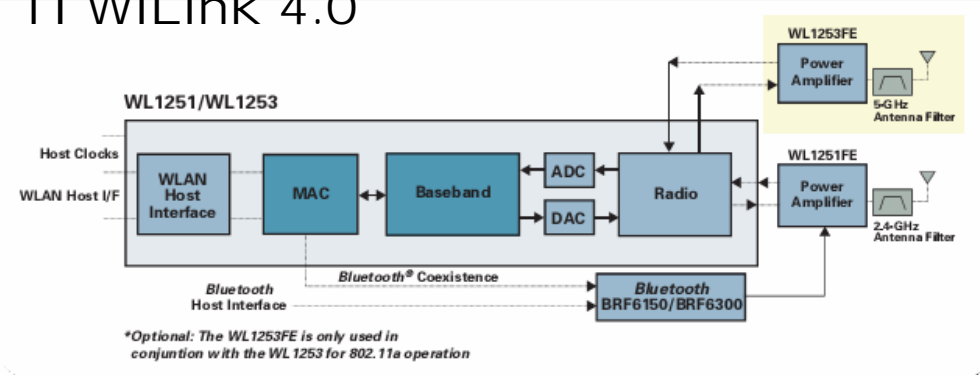


Touch Air



WIFI	802.11b/g WL1251 single chip
Bluetooth	BRF6300 2.0+EDR

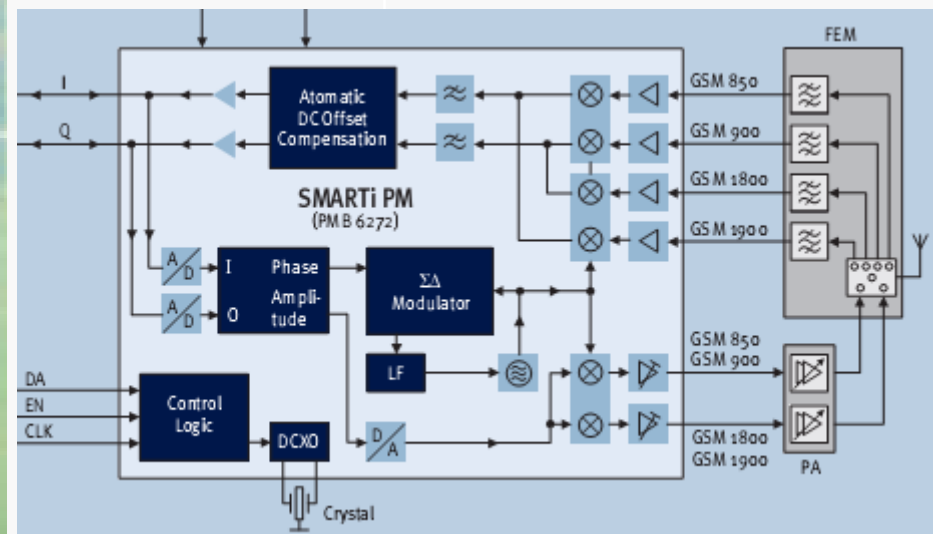
TI WiLink 4.0



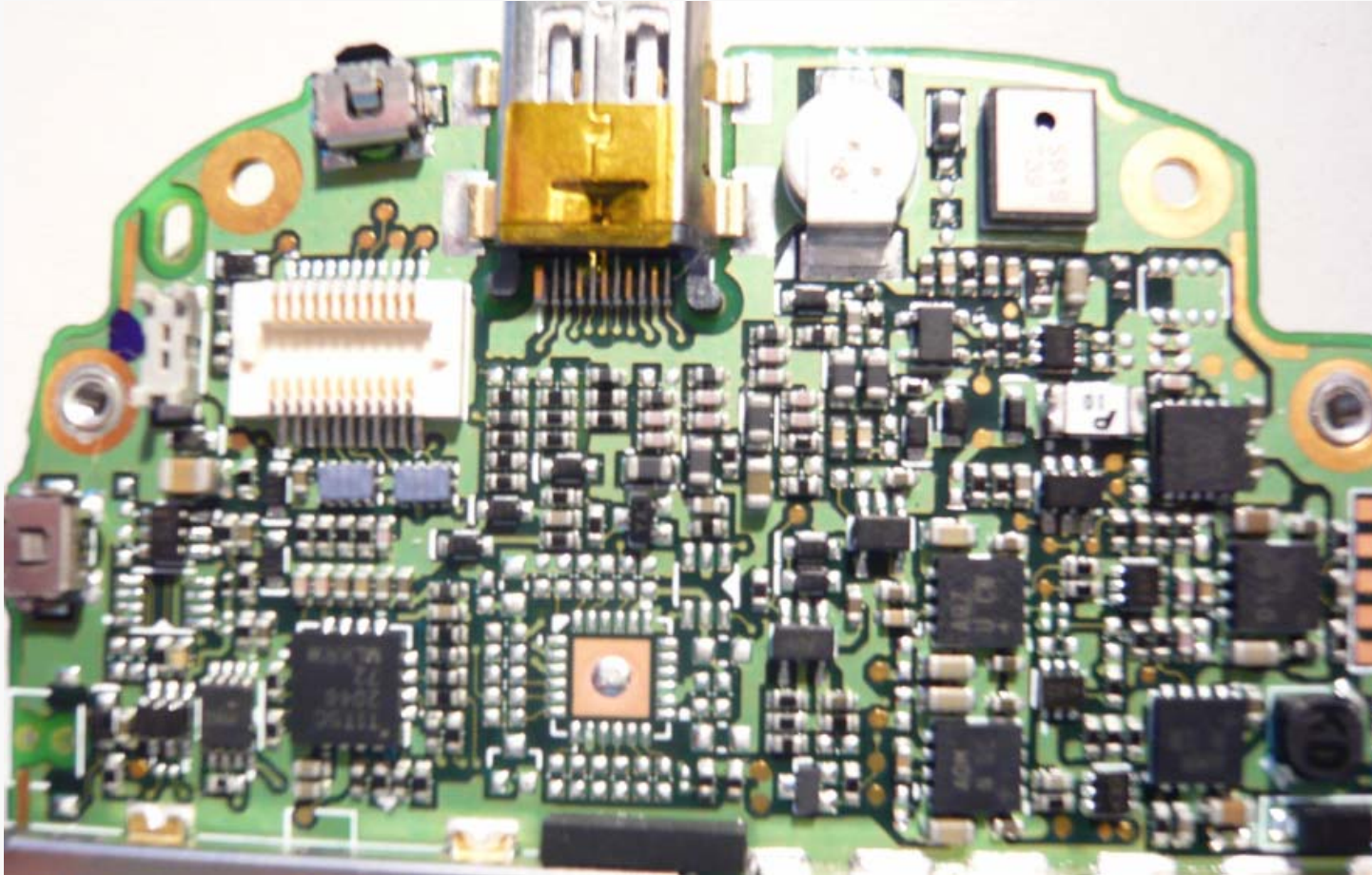
Touch Air (Cont.)



GSM Transceiver	Infineon PMB6272
GSM PA	RFMD 3158 Quad-Band GSM/EDGE
ASM	Unkown
XTAL	26MHz

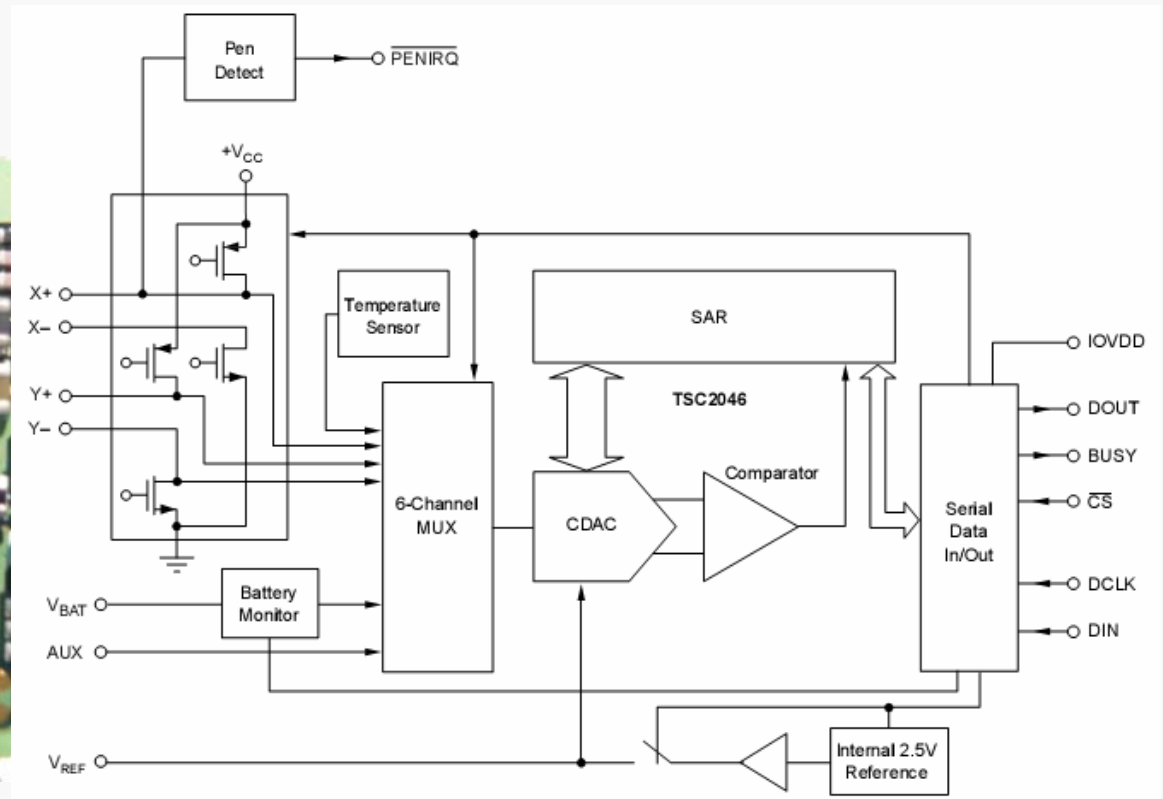
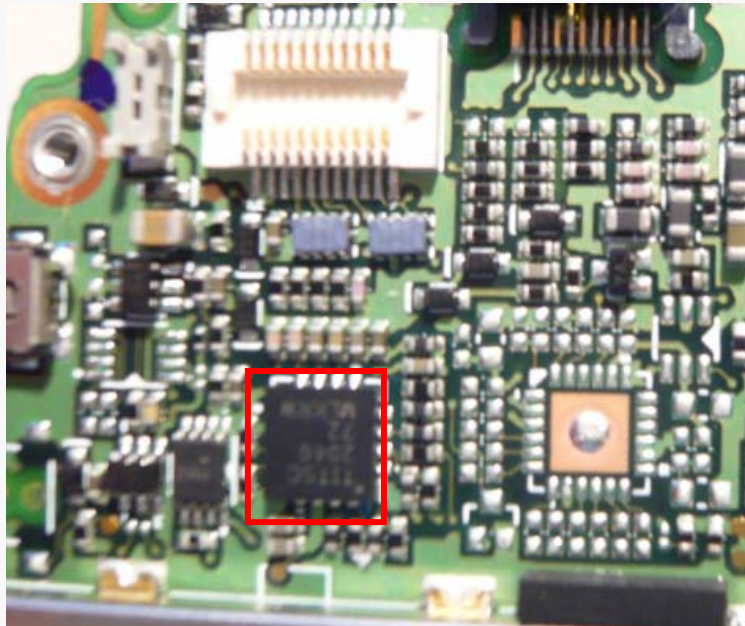


Power to touch

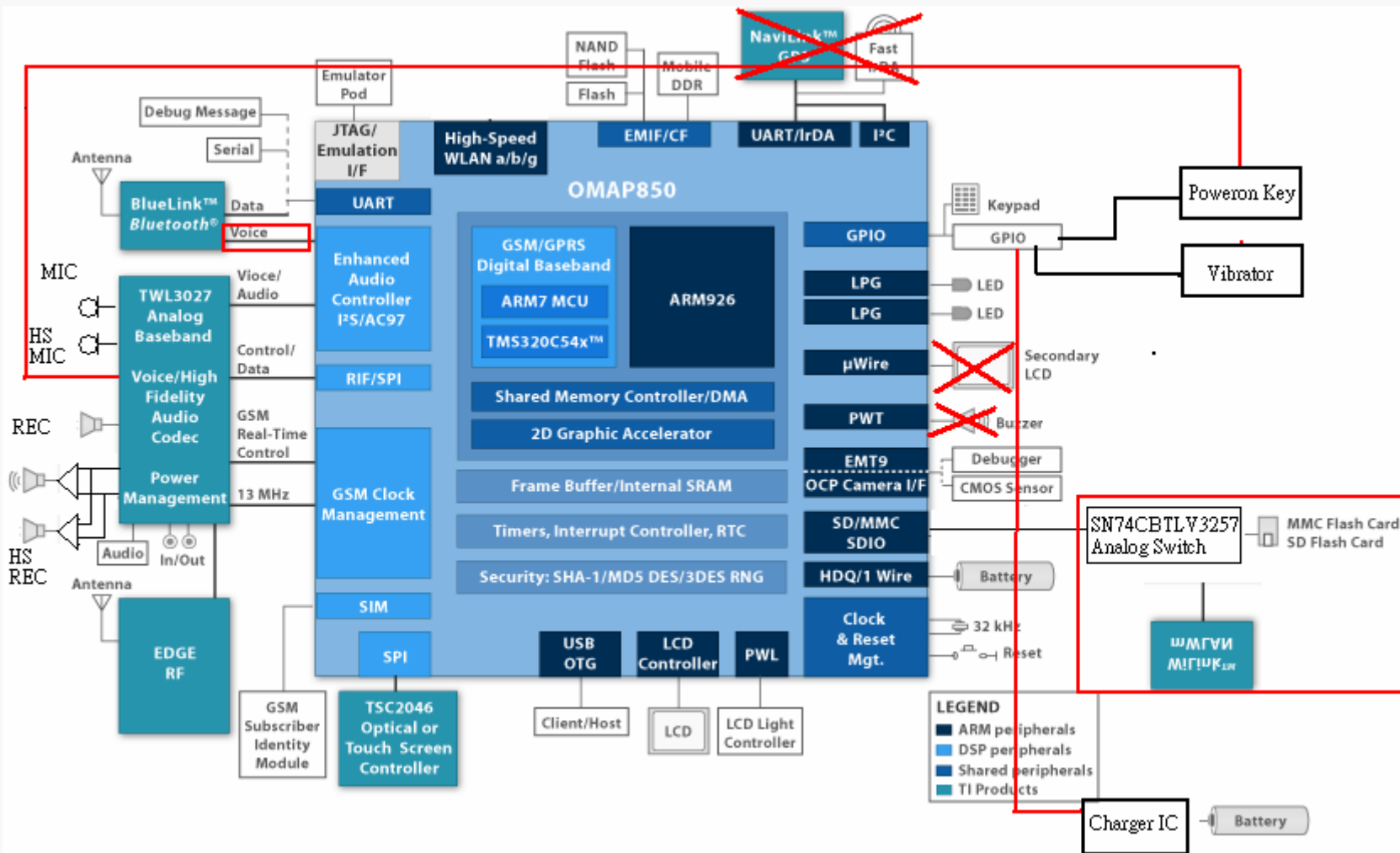


TI OMAP platform uses discrete power switches, LDOs and DC/DC converters to supply the wanted voltage of every part. These chips vendor are almost TI undoubtedly.

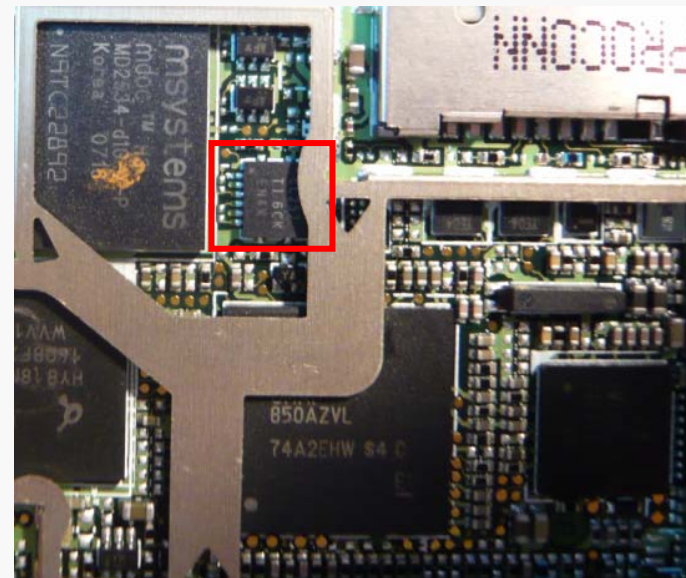
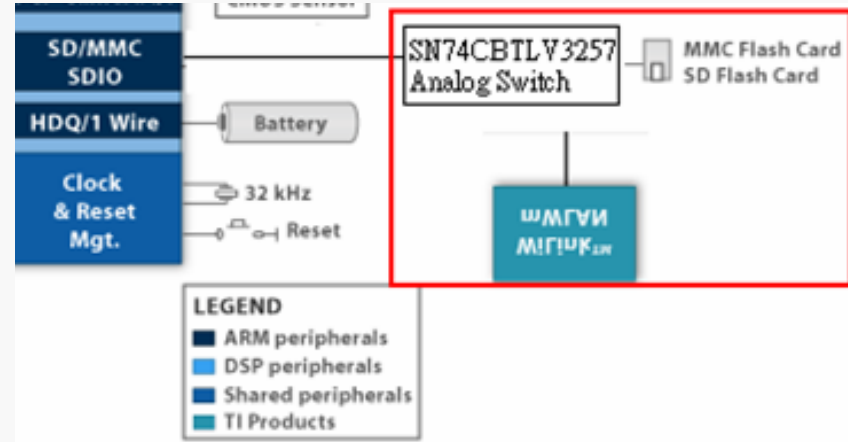
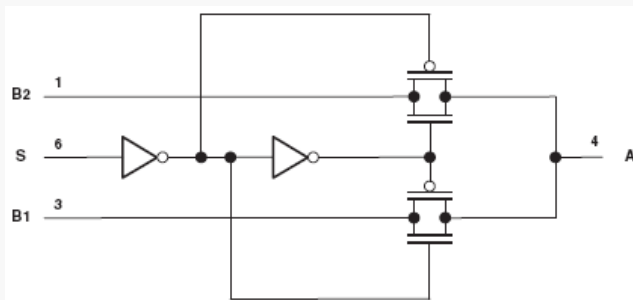
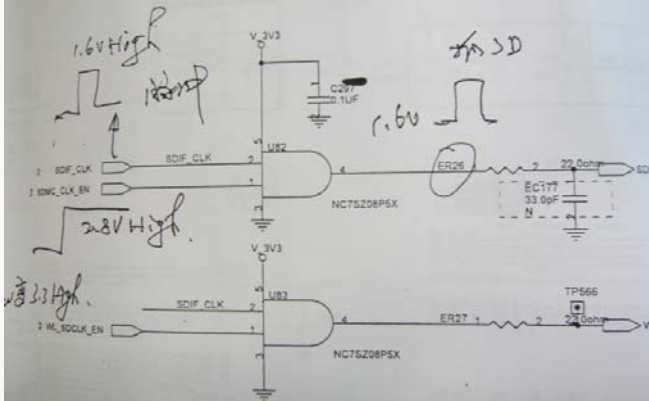
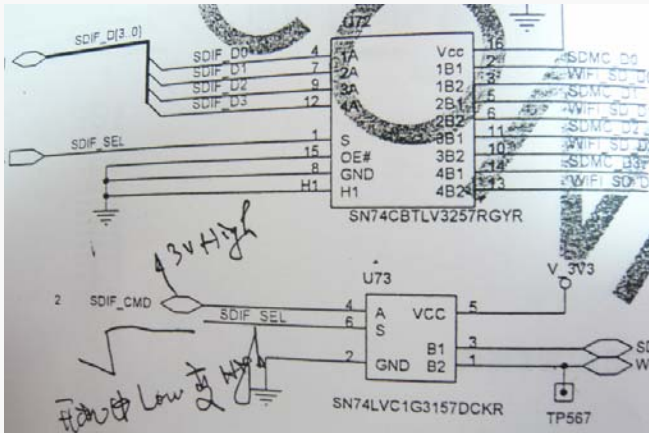
Touch to touch



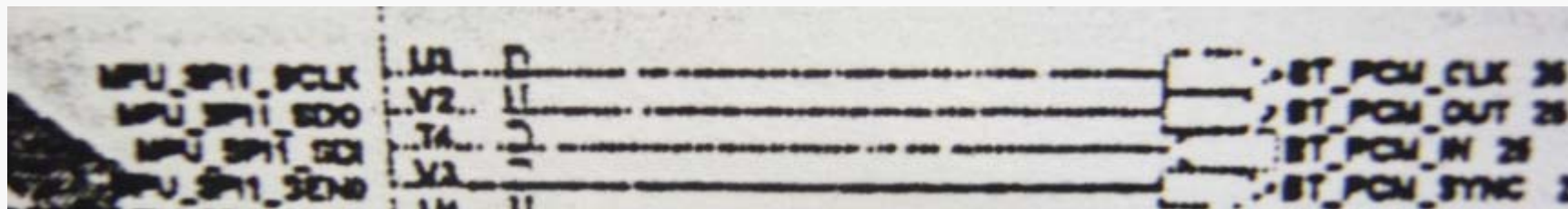
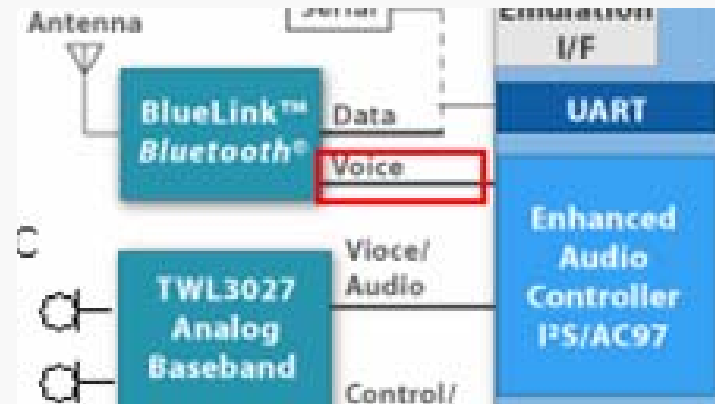
Touch interface



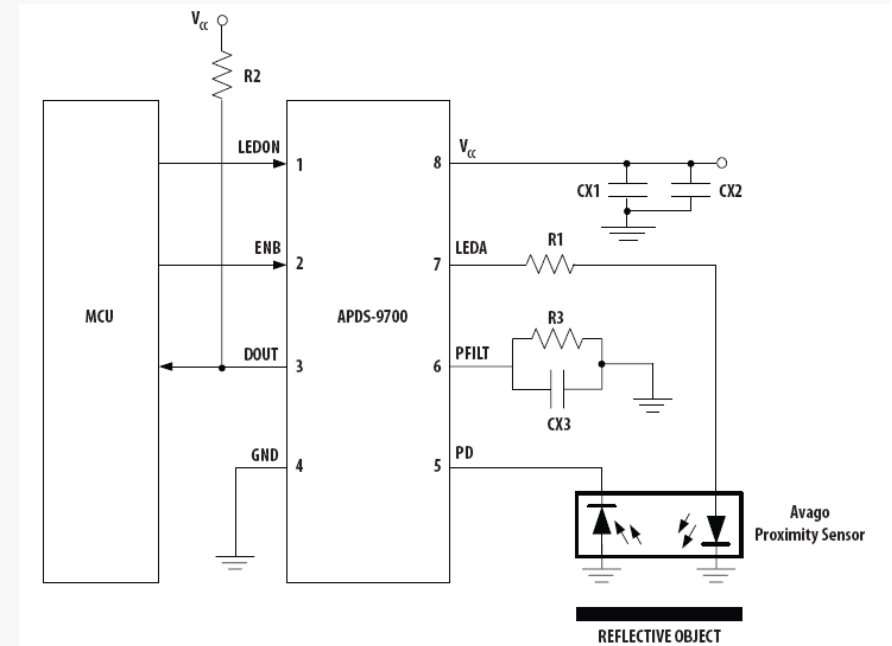
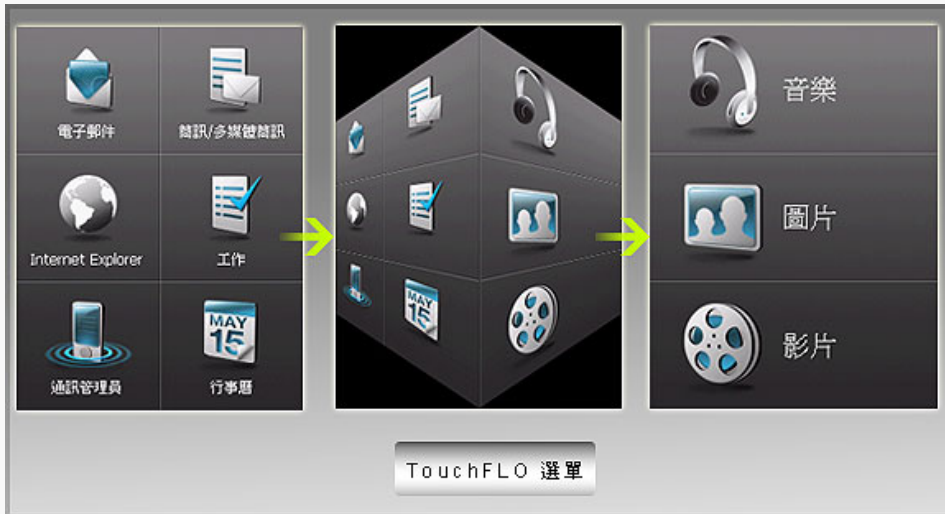
SDIO interface using analog switch



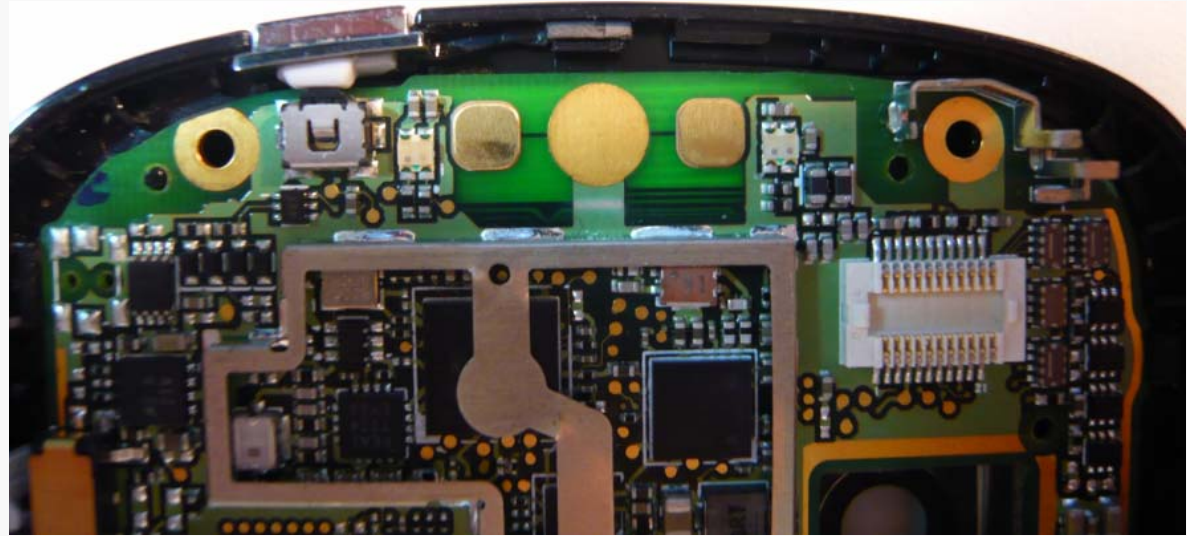
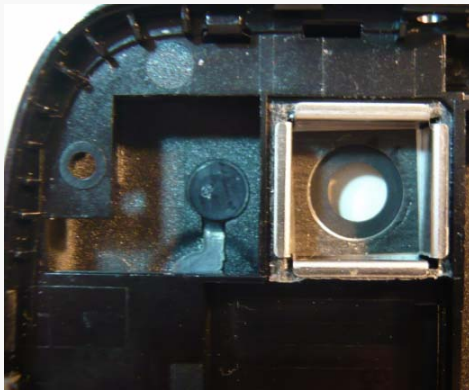
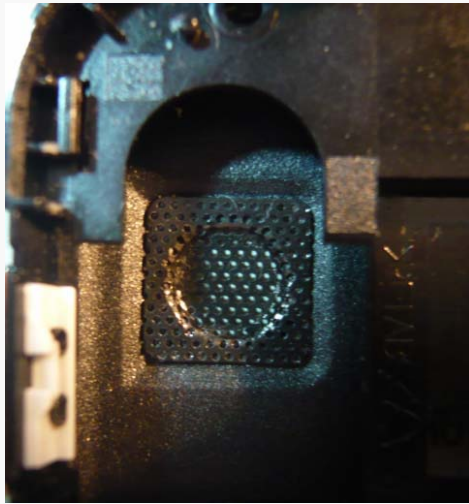
SPI implements PCM for BT



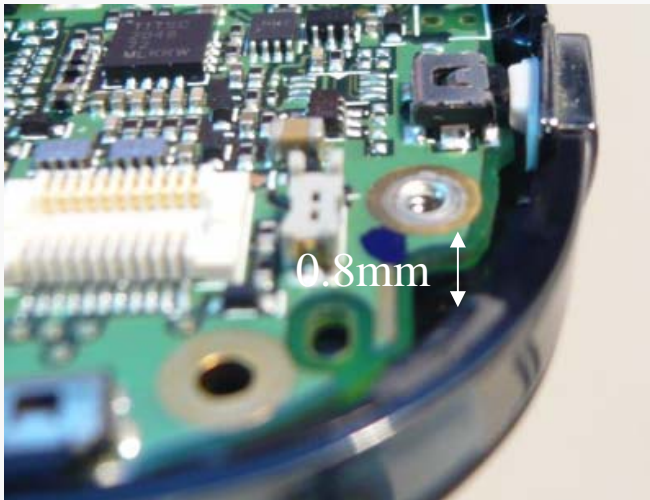
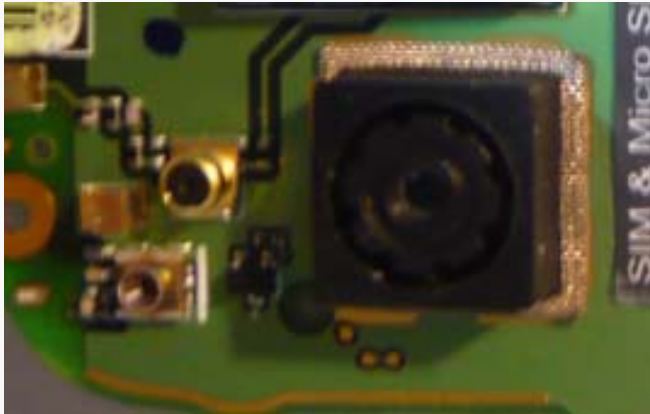
Touch FLO and proximity sensor



Touch cover



Thinner Touch

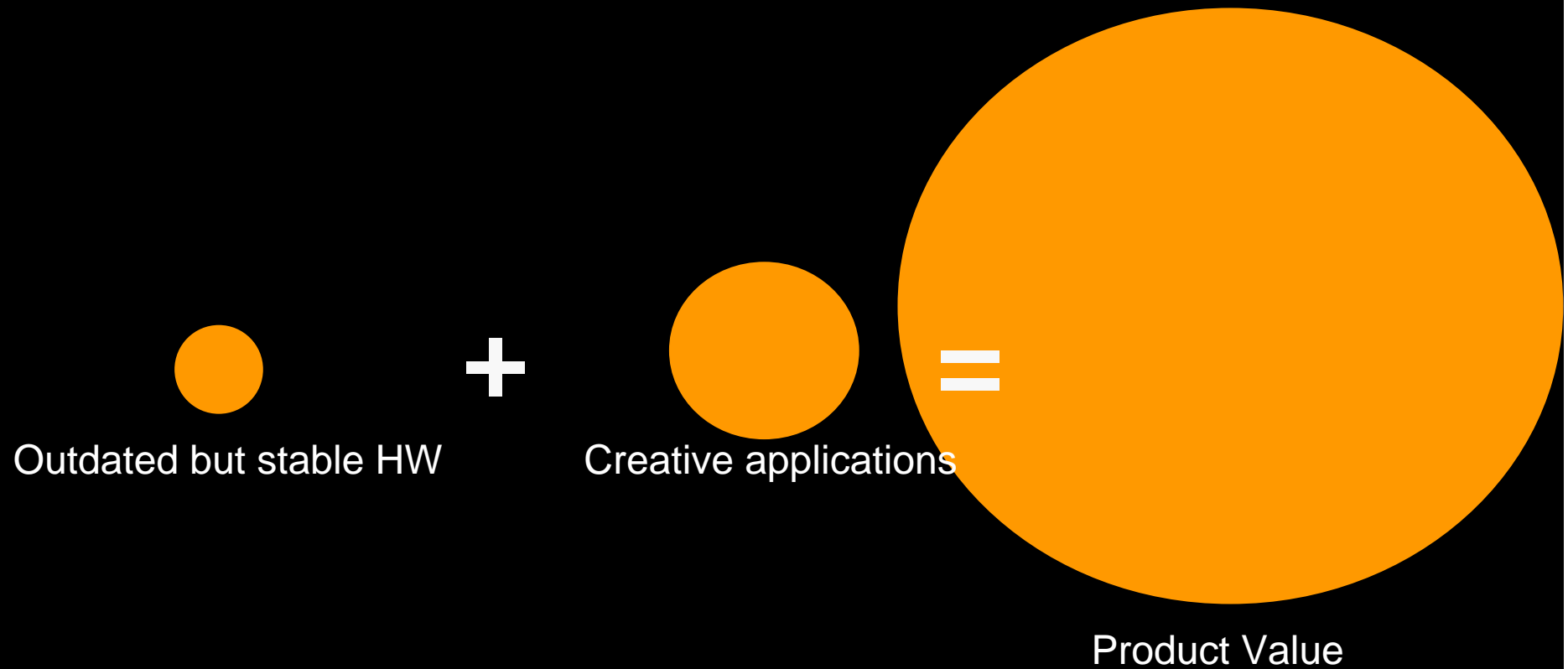


- Thinner LCM
- Low Profile Antenna
- Low Profile POGO Pin
- Low Profile Camera Module
- Speaker without chamber

Thinking from touch



Thinking from touch (Cont.)



Questions??