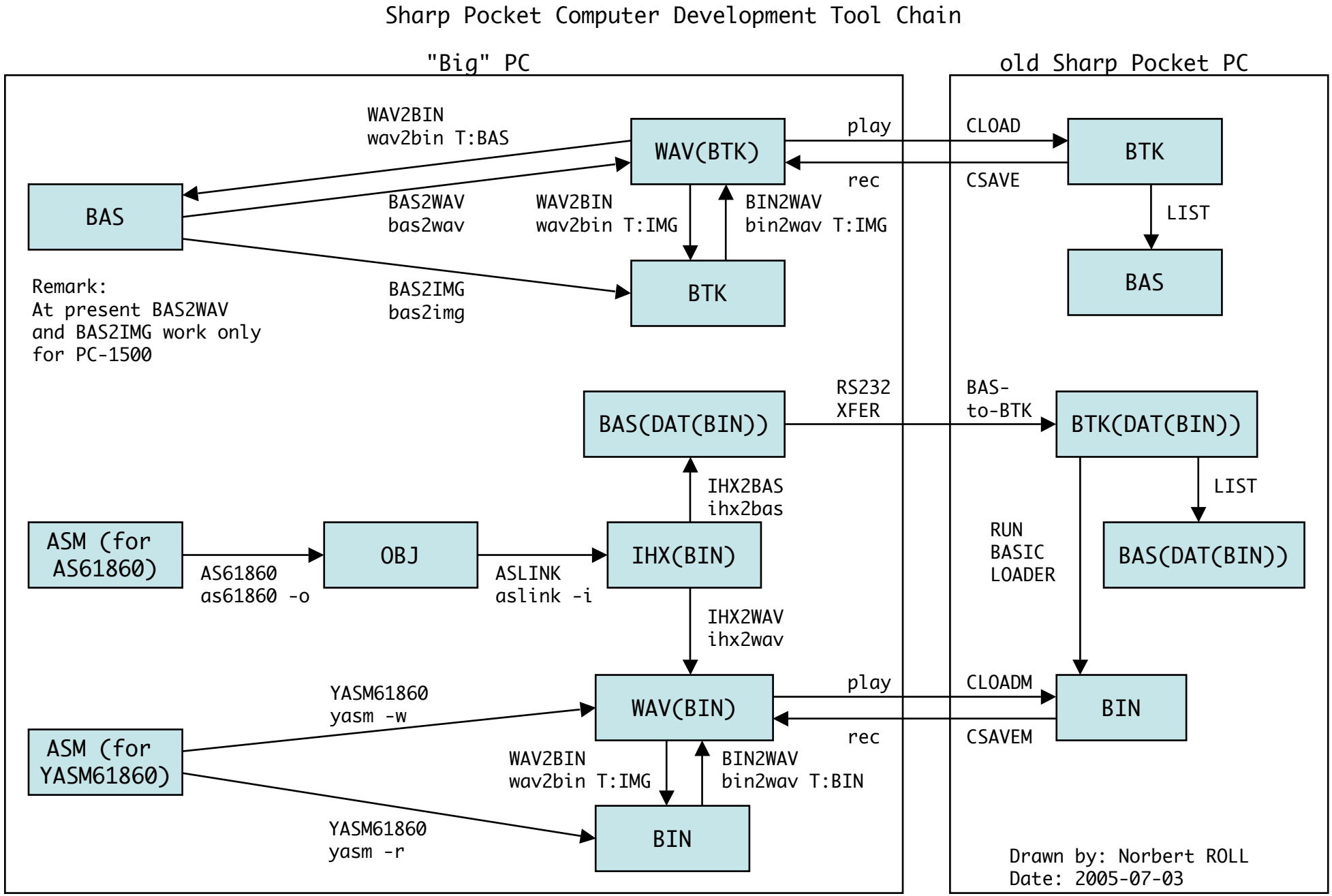
Sharp Pocket Computer Development Tool Chain
"Big" PC
old Sharp Pocket PC
WAV2BIN
wav2bin T:BAS
WAV(BTK)
play
rec
CLOAD
CSAVE
BTK
LIST
BAS
BAS2WAV
bas2wav
WAV2BIN
wav2bin T:IMG
BIN2WAV
bin2wav T:IMG
BAS2IMG
bas2img
BTK
Remark:
At present BAS2WAV
and BAS2IMG work only
for PC-1500
RS232
XFER
BAS-
to-BTK
BAS(DAT(BIN))
BTK(DAT(BIN))
IHX2BAS
ihx2bas
LIST
ASM (for
AS61860)
AS61860
as61860 -o
OBJ
ASLINK
aslink -i
IHX(BIN)
RUN
BASIC
LOADER
BAS(DAT(BIN))
IHX2WAV
ihx2wav
YASM61860
yasm -w
WAV(BIN)
play
rec
CLOADM
CSAVEM
BIN
ASM (for
YASM61860)
WAV2BIN
wav2bin T:IMG
BIN2WAV
bin2wav T:BIN
YASM61860
yasm -r
BIN
Drawn by: Norbert ROLL
Date: 2005-07-03

Sharp Pocket Computer Development Tool Chain

Formats:
BAS = BASIC program, BASIC key words fully written out (ASCII only, e.g., "GOTO 60"
BTK = BASIC program, BASIC key words coded as tokens (ASCII and codes, e.g., &C6 "60"); also often called an IMG.
BIN = generally a block of bytes (can be a BASIC or machine language program or data)
DAT = DATA lines in a BASIC program as a way of storing data in a BASIC program
IHX = BIN in Intel Hex format, represents any data (mostly binary) in ASCII together with check and start information
WAV = a simple 8 bit sound code format, in connection with old Sharp Pocket PC used for the representation of a BIN or a BTK as a specific sound used for communicating via the cassette routines
ASM = machine language program written in ASCII (assembler text), has to be converted to the machine language codes of the chosen target processor (here: Sharp SC61860). This conversion is done by the so-called assembler. Different assembler for the same target processor may use different commands in the program text. E.g., for AS61860 and YASM61860 to produce the same BIN, the assembler text is different.
OBJ = intermediate format, output of the assembler and input of the linker

Remark: File extensions are not always equal to the format identifiers used above.

Utilities:
WAV2BIN = utility for conversion from WAV to BIN, BTK or BAS
BIN2WAV = utility for conversion from BIN or BTK to WAV
BAS2IMG = utility for conversion from BAS to BTK (PC-1500 only)
BAS2WAV = utility for conversion from BAS to WAV (PC-1500 only)
AS61860 = assembler for Sharp SC61860 processor (most old Sharp Pocket PC); output must be processed by ASLINK linker
ASLINK = linker for ASXXXX (generic), among others for AS61860; BIN output in Intel Hex format (and other formats)
YASM61860 = assembler (no linker neeeded) for Sharp SC61860 processor (most old Sharp Pocket PC)
IHX2WAV = utility for conversion from BIN in Intel Hex format to WAV
IHX2BAS = utility for conversion from BIN in Intel Hex format to BAS with BIN in DATA lines and BASIC loader for BIN
play and **rec** = playback and record using Sharp audio cassette interface and e.g. Audacity sound editor (1.2.3; Win, Mac, Linux) from http://audacity.sourceforge.net/
RS232 XFER = Transfer of BAS from big PC to Pocket PC using the serial (RS232) interface (if available)
BAS-to-BTK = Automatic conversion from BAS to BTK by Pocket PC performed during transfer (RS232 or keyboard) of a BAS into the Pocket PC
LIST = Built-in command for viewing BASIC program text (automatic conversion from BTK to BAS for display)
RUN BASIC LOADER = Small BASIC program storing data from BASIC DATA lines into the memory, mostly used to make a machine language program ready to run

References:
WAV2BIN (1.33 PC, 1.34 MacOSX, C sources available) and **BIN2WAV** (1.30 PC, 1.31 MacOSX, C sources available) by Jean-Francois LAROCHE from http://pocket.free.fr/index.html: software (Pocket Computer Museum)
BAS2IMG (4.00 PC, executable only) and **BAS2WAV** (5.3 PC, executable only) by Joachim BOHS from http://pocket.free.fr/index.html: software (Pocket Computer Museum)
YASM61860 (1.01, Perl script) by Hiroyuki KOBAYASHI (Yagshi) from http://www.ohshe.bs.teu.ac.jp/~yagshi/pocketcom/yasm-e.html
AS61860 (4.00, C sources) by Alan R. BALDWIN (generic ASXXXX) and Edgar PUEHRINGER (AS61860) from http://shop-pdp.kent.edu/ashtml/asxget.htm (SHOP-PDP.KENT.EDU)
ASLINK (4.00, C sources) by Alan R. BALDWIN from http://shop-pdp.kent.edu/ashtml/asxget.htm (SHOP-PDP.KENT.EDU)
IHX2WAV and **IHX2BAS** (both 2003-04-17/2004-10-16, C sources available) by Edgar PUEHRINGER from http://www.geocities.com/edgar_pue/sharp/index.html: File Archive: bigpc: ihxconv-0.8.1.tgz = http://www.geocities.com/SiliconValley/Byte/3964/sharp/filesbigpc.html: ihxconv-0.8.1.tgz (SharpCalc Pocket Computer Resources)

Compiled by: Norbert ROLL **Date of last modification: 2005-07-03**