API and ABI Versioning

PY_VERSION_HEX is the Python version number encoded in a single integer.

For example if the PY_VERSION_HEX is set to 0x030401a2, the underlying version information can be found by treating it as a 32 bit number in the following manner:

Bytes	Bits (big endian order)	Meaning
1	1-8	PY_MAJOR_VERSION (the 3 in 3.4.1a2)
2	9-16	PY_MINOR_VERSION (the 4 in 3.4.1a2)
3	17-24	PY_MICRO_VERSION (the 1 in 3.4.1a2)
4	25-28	PY_RELEASE_LEVEL (0xA for alpha, 0xB for beta, 0xC for release candidate and 0xF for final), in this case it is alpha.
	29-32	PY_RELEASE_SERIAL (the 2 in 3.4.1a2, zero for final releases)

Thus 3.4.1a2 is hexversion 0x030401a2.

All the given macros are defined in Include/patchlevel.h.