# Key parameter list (2001.3.27)

| | Nominal | Back-up |
|---|---|---|
| Kinetic energy, $E_k$ [MeV] | 1000 | 975 |
| Uncertainty, $\Delta E_k$ (95% probability) [MeV] | +/- 15 | +/- 15 |
| SRF cryo-module number | 11+12 | 11+15 |
| SRF cavity number | 33+48 | 33+60 |
| Peak gradient, $E_p$ ($\beta$=0.61 cavity) [MV/m] | 27.5 (+/- 2.5) | 27.5 (+/- 2.5) |
| Peak gradient, $E_p$ ($\beta$=0.81 cavity) [MV/m] | 35 (+2.5/-7.5) | 27.5 (+/- 2.5) |
| Chopper beam-on duty factor [%] | 68 | 68 |
| Linac duty cycle [%] | 6.0 | 6.0 |
| Pulse length on target [ns] | 695 | 699 |
| Power on target, $P_{max}$ [MW] | 1.5 | 1.7 |
| Linac peak current, $I_{peak}$ [mA] | 41 | 47 |
| Linac average current, $I_{ave}$ [mA] | 1.7 | 1.9 |
| Ring rf frequency [MHz] | 1.058 | 1.054 |
| Ring injection time [ms] / turns | 1.0 / 1060 | 1.0 / 1054 |
| Ring bunch intensity [$10^{14}$] | 1.7 | 1.9 |
| Ring space-charge tune spread, $\Delta Q_{sc}$ | 0.16 | 0.20 |

assuming 4% injection loss; 4% target window loss; linac max. -20° phase