Request For Proposal

RFP:IBM-7030 (Project Stretch)	**Proposal Due date** : 20 Nov 1958	**Comapny Name** :IBM

Project Overview :
Project Stretch is a supercomputer mainly for scientific applications.Project is directed more specifically toward achieving, on very large mathematical computing problems, the highest performance possible within certain limits of time and resources.The purpose of setting so ambitious a, goal is to stimulate innovation in all aspects of computer design.

Project Goals :
- To make a supercomputer 100 time faster than IBM-704
- To make a effective and better design of a computer architecture
- To introduce new technology like parallel pipline,parallel binary arithmatics and page caching

Project Objectives:

1.Performance : An over-all performance leve1 of 100 times that of the fastest machines then in existence.

2.Reliability : Solid-state components promised t'he much higher reliability needed for satisfactory operation of a necessarily complex machine.

3.Checking : Extensive automatic checking facilities were intended to detect any errors that occurred and to locate faults within narrow limits.

4.High-speed Arithmetic : A high-speed parallel arithmetic unit is to execute floating-point additions in 0.8 microsecond and multiplications in 1.4 microseconds.

6.Memory : The main memory is to have a cycle time of only 2 microseconds. The capacity was to be 8,192 (later raised to 16,384) words per unit.

7.Input-Output Exchange A unit resembling somewhat a telephone exchange was to provide simu1taneous operation of all kinds of input-output, storage, and data transmission devices.

Current Roadbloack
- New transistors, new cores, new logical features, and new manufacturing techniques are needing.
- New Architecture for computer design
- Parallel pipelining ,Paging and memory units are need to be improve

Evaluation Matrix : The responders must meets following requiements:
- The education, experience, knowledge, skills, and qualifications required for project.
- Past experience with similar domain.

Time To Build : Project must be done within 3 year of time

Bugdet: $ 6700000

Project Incharge: Gene Amdahl	**Place of Contact** : Poughkeepsie, N.Y.