

**Letter of Intent
on
LCD VGA Controller Joint Development**

OBJECTIVES

The objective of this Letter of Intent is to establish a working relationship between Chips and Technologies, Inc. ("CHIPS") and ASCII Corporation ("ASCII") that will result in the development of an LCD VGA controller. The working relationship will combine ASCII's working knowledge of LCD panels with CHIPS's VGA design data base and silicon design expertise and design tools.

DEFINITIONS

The LCD VGA controller chip ("CONTROLLER") to be jointly developed by ASCII and CHIPS shall be defined by the product specification being developed by CHIPS, with inputs on the LCD panel interface from ASCII. Not included in this joint development are derivative works between ASCII and CHIPS. Such follow-on joint developments will be reviewed by both parties on an individual opportunity basis.

CONTRIBUTIONS

The joint development program must focus on the development of a VGA-compatible LCD controller based on CHIPS VGA-compatible design data base and ASCII LCD panel interface expertise. In order to successfully execute the development program, the following contributions are required from ASCII and CHIPS:

ASCII Contributions:

1. Technical inputs on the LCD panel interface.
2. Participation in the CONTROLLER specification development.
3. Design engineers (two) to work with CHIPS in San Jose during the CONTROLLER design and debugging.

CHIPS Contributions:

1. VGA design and compatibility data base.
2. Develop CONTROLLER requirements document (market requirements) and product specifications with ASCII.
3. Design of backward compatibility modes (for CGA, EGA, MDA, and Hercules video) and proprietary color to grey scale mapping algorithm.
4. Design tools and CPU time and NRE expenses associated with the foundry (or foundries) that will produce the CONTROLLER.

ROYALTY PAYMENTS

In recognition of the contributions ASCII will be making to the joint development, the following will define the royalty payments from CHIPS to ASCII. Such royalty payments shall apply to the sale of the CONTROLLER developed through this joint development, on a world-wide basis, for the total quantity specified.

First 250K CONTROLLERS: 5% of ASP

Next 250K CONTROLLERS: 3% of ASP

Royalty payments shall be completed after 500K CONTROLLERS are sold.

PROPOSED TIMETABLE

1. Technical exchange (ASCII/CHIPS): January, 1988.
2. Product requirements document (CHIPS): January, 1988.
3. Product specification (ASCII/CHIPS): February, 1988.
4. CONTROLLER design (ASCII/CHIPS): TBD
5. Evaluation board specification and design (CHIPS): TBD
6. CONTROLLER debugging (ASCII/CHIPS): TBD

Note that while the design and debugging dates are "TBD", it is important that first silicon samples be targeted for no later than May, 1988.

RIGHTS OF THE PARTIES

1. All rights and titles to the patents, inventions, and discoveries made or acquired in connection with the joint development activities for the CONTROLLER shall be jointly owned by ASCII and CHIPS. Both parties will be free to use such patents, inventions and discoveries for internal use. Transfer of such rights and titles to third parties will require the agreement of both parties.
2. Patents and inventions developed by the individual parties prior to the joint project will remain sole property of the contributing company.
3. CHIPS shall have exclusive title and rights to the Maskwork and associated information required to develop that maskwork, including, but not limited to, the netlist, logic schematics, test vectors, etc.
4. CHIPS shall have exclusive rights to the sale of the CONTROLLER. As CHIPS sales representative, ASCII shall treat the CONTROLLER in the same manner as all other CHIPS products regarding exclusivity and non-exclusivity in the sales regions.
5. ASCII will not undertake a third party joint development or technical consulting on any other similar LCD VGA-compatible controllers with personnel from the same organization as is working with CHIPS during the period from the signing of the Letter of Intent until first functional samples of the CONTROLLER and a period of 1 year thereafter.

6. The party, contributing to the development as provided under Paragraph of CONTRIBUTIONS, will be responsible for any claims of infringement on third parties's intellectual property rights in the field of the contributions.

CONFIDENTIALITY

All confidential or proprietary information disclosed by either party in connection with this joint development shall be kept in confidence and shall not be used for any other purposes by the receiving party, unless expressly authorized in this Letter of Intent or by a separate written agreement, for a period of two years from the signing of this agreement or unless such information:

1. was known to the receiving party prior to its receipt,
2. is or becomes generally available through no fault of the receiving party, or
3. is independently developed by the receiving party, which fact shall be substantiated by reasonable evidence.

FORMAL AGREEMENT

ASCII and CHIPS will enter into a formal agreement for the joint development of the CONTROLLER. The provisions of this Letter of Intent shall not be binding upon the parties and shall be expressly subject to execution of such formal agreement, except the CONFIDENTIALITY provisions which shall be binding upon both ASCII and CHIPS.

GOOD FAITH NEGOTIATION

All differences and disputes arising out of this Letter of Intent and of the formal agreement shall be amicably settled between ASCII and CHIPS. In the absence of such amicable settlement, all such differences and disputes shall be settled in California by arbitration through the American Arbitration Association, if ASCII is the complaining party, and in Tokyo by arbitration through the Japan Commercial Arbitration Association, if CHIPS is the complaining party.

ASCII Corporation

By _____

Date: _____

Chips and Technologies, Incorporated

By _____

Date: _____