17. Introduction

This plan summarizes manufacturing requirements for CCPS.

17.1 Organization

The Manufacturing organization in charge of creating the CCPS X.25 I/O board is BoardTech. Mr. Ido Bords represents BoardTech.

17.2 Documentation Requirements

The documentation requirements for the factory are covered separately in the Design Transfer section of the project plan.

17.3 Ordering

After contract signing, BoardTech will have a model in 9-12 months. If satisfactory, the manufacturer will order the parts thereafter.

17.4 Production Requirements

The first production board will be produced in 15 months (actual dates in Table 17.4). A month after that, the rest of the boards will be produced. Given that the board is delivered on time there is a risk of faulty parts. This can hinder integration testing.

17.5 Factory Test

The testing strategies to be used are discussed below.

17.5.1 Circuit Pack Test

The first production board will be tested using an in-circuit test set. The manufacturer's circuit pack testers will write the fixturing and test program. The factory will do a Design for Testability review.

17.5.2 System Test

Integration testing of the board will begin August 11, 2012. If integration testing finishes on time, system testing will begin August 21, 2012.

17.5.3 Other Tests

FCC, EMI, UL, etc., tests are covered in the Qualification section of this project plan.

17.6 Schedule/Ramp-Up

The first installation ship date from the factory is December 23, 2014. The ramp-up schedule is as follows: after beta deployment, the remaining 10 boards will start being manufactured on January 11, 2015 until February 9, 2015.

17.7 Defective Product

There is a 2-5% probability that the boards might be defective. If that is the case, BoardTech will have an allotted time, possibly a week to two weeks, to complete a working board.

17.8 Change Management

CCPS Project Plan
Manufacturing Plan

A contract has been specified for the production of the hardware: there is however an incentive of $100,00 for on-time deliveries.

17.9 Issues

The first production board must be produced and delivered in time for the first "soak".

BoardTech is given a month to ship the completed boards, which creates a buffer for any unforeseen event, like bad weather, and other slight delays.

TABLE 17.4 - MANUFACTURING REQUIREMENTS				
Item	*Purpose*	*Quantity*	*Need Date* *(for assembly, installation, etc.)*	*Ship Date* *(from mfg.)*
Prototype board	*Software development*	1	9/02/2014	8/02/2014
Tool-made sample	*System integration*	1	12/23/2014	11/23/2014
Production board	*EMI testing*	1	11/02/2014	10/02/2014
Production board	*UL testing*	1	11/02/2014	10/02/2014
Production board	*First installation*	1	01/11/2015	12/11/2014
Production board	*Following installation*	10	01/22/2015	12/22/2014
You don't need to complete the rest for the class.				